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PRESERVATION OF NATIONAL MONUMENTS.

13014

FIRST REPORT

OF THE

CURATOR OF ANCIENT MONUMENTS IN INDIA

FOR THE YEAR 1881-82.



SIMLA :

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PRESERVATION OF NATIONAL MONUMENTS.

FIRST REPORT

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FOR THE YEAR 1881-82.

PREFACE.

IN April 1880, the Supreme Government placed me on special duty for the purpose of investigating the condition of monumental buildings at Lahore, Delhi, and Agra. After visiting these places, I submitted a report, dated 10th May, together with a List of the Principal Monuments throughout India (see Appendix II, page xix). I have now added to this list particulars of the works of conservation that have been undertaken and are in progress.

2. A temporary establishment of draftsmen sanctioned by the Government was engaged during the year in measuring the buildings at Lahore and Delhi mentioned in this report; and during July, I inspected and directed the work.

3. The measurement of the structures *in situ* and the fairing out of the drawings proceeded during the year. A party of draftsmen were engaged later on at Sanchi and Mandu; and the work at Lahore, Delhi, and Amritsar was continued up to April 1881, when the whole party assembled at head-quarters and turned their attention to the completion of drawings.

Tour in November-December 1880

4. On the 2nd November 1880 I left Simla on tour, visiting Lahore, Amritsar, Agra, Gwalior, Allahabad, Sanchi, Mandu, Ujain, Benares, Jampur, returning to Simla, where I drew out reports on the places visited, and awaited the directions of the Government of India. In obedience to orders, I proceeded to Calcutta, arriving on the 19th January 1881.

Appointment of Curator.

5. On the 28th January I was gazetted Curator of Ancient Monuments in India; and on the 2nd February following, received instructions to inspect the principal monuments throughout India (see Resolutions in the Home, Revenue and Agricultural Department, Appendices I and K, page lxxiii).

Tour in Madras, Bombay, and Allahabad, 1880.

6. I left Calcutta on the 6th February, and proceeded to Madras, visiting Mahavellipur, Vellore, Trichinopoly, Srirangam, Madura, Tanjore, Kombakonum, Chillambaram, Congeveram, and Bijanagar. I then proceeded to Kalburgah in the Nizam's Dominions, and on to Bombay, seeing Bijapur, Poona, Karli, Ambernath, Elephanta, and Ahmedabad. Passing up the Rajputana State Railway, I visited Mount Abu, Ajmir, Ulwar, Jaipur, and Delhi, returning to Simla on the 16th April.

7. From May I was engaged in compiling the preliminary reports on Madras, Bombay, Rajputana, Kalburgah, and Central India.

8. During July I inspected the Delhi walls and gates and the fortress at Gwalior, where Major Keith is employed on special duty, in renovating its ancient buildings.

9. During November I visited Lahore, in company with Mr. Heath, Executive Engineer, Archaeological Division, Agra, in order to ascertain whether he could undertake to superintend repairs to monuments at Lahore and Delhi, in addition to his work in the North-Western Provinces.

10. The members of my establishment were uninterruptedly employed in fairing out plans and drawings up to

the end of November, when they accompanied me to Umballa, where during December and January 1882 I was busy with regimental studies previous to an examination for promotion to Major, held on the 30th and 31st of January. This greatly encroached on my tour season; but the draftsmen continued their work, a party proceeding on the 12th December to Madras to survey at Trichinopoly and Madura.

Tour in 1882
shortened.

11. Leaving the remainder of the draftsmen at Umballa to continue their plans and fairing out, I proceeded to Peshawar, where I arrived on the 6th February, visiting Ranighat, Shahbazgarhi, the Karamar Hill, Bakshali and Takht-i-Bahi in Eusofzai, and Charsuddah in Hastnagar.

Peshawar
District.

12. After Eusofzai I proceeded to Nur Mahal, near Phillour, and then to Gwallior, Agra, Buddha Gya, and *via* Calcutta to Madras, Madura, Bombay, Indore, Ajmir, and back to Simla on the 7th April. From the 24th April to the 7th June I became occupied with the theoretical subjects obligatory in the examination for promotion to Major.

Tour in Ben-
gal, Madras,
Central In-
dia, 1882.

13. Having briefly sketched out the way in which my time has been employed since April 1880, I venture to submit some preliminary and general observations on the subject of conservation of national monuments; the various appendices particularise in detail what has been recommended to the various Local Governments, Administrations, and Native States, and what are the steps that have been severally taken.

Recommend-
ations by
Local Gov-
ernments, &c.



CHAPTER I.

EARLY INVESTIGATIONS, AND MEASURES UNDERTAKEN FOR THE PROTECTION AND REPAIR OF BUILDINGS—BETWEEN THE YEARS 1808 AND 1860.

*Previous
monuments.*

14. It will probably be neither out of place or uninteresting to trace the various steps that have led up to the present systems for archaeological investigation, and for preserving the structures themselves, or records of their architecture.

*Early inves-
tigations.*

15. During the infancy of British rule, officials, although fully occupied with the arduous tasks of government, found leisure to investigate local antiquities, and the names of Todd, Wilson, Prinsep, Buchanan, Kittoe, in Bengal; of Mackenzie, Elliot, in Madras; and of Sykes, Forbes, Wilson, Bhaudaji, in Bombay, are illustrious examples of such individual labours.

*Early Eastern
travellers.*

16. The accounts of the early Eastern travellers are also so numerous and interesting, that I have ventured to place in the Appendix (see M, pages lxxvi to cv) a Catalogue of Works referring to Indian and Oriental Architecture, Art and Archaeology.

*Care of mo-
numents in
early days.*

17. A sentiment of respect for the monuments of the past has not unfrequently been exhibited by the early Governors General. India is indebted to the Earl of Minto, the Marquess of Hastings, Lord Amherst, Lord Auckland, Lord Canning, and others, for the present state of preservation of some of the most beautiful monuments of Indian antiquity.

Taj, 1808.

18. In 1808, during the administration of the Earl of Minto, a Taj Committee was appointed, and Lieutenant Taylor was entrusted with repairs, which exceeded Rs. 1,00,000 in cost.

*Fatehpur-
Sikri and Si-
kandra, 1815.*

19. In 1815 the Marquess of Hastings directed repairs at Fatehpur-Sikri and Sikandra; and in the following year the local agents at Agra were instructed to negotiate for the surrender of the lease of the grounds belonging to the Tomb of Akbar, and to propose a small establishment for keeping

the grounds; whilst Lieutenant J. Taylor was sent to reside at Sikandra for the purpose of preserving the tomb from ruin.

20. In 1816 the pensions of deceased kadims at the Taj ^{Taj, 1816.} were discontinued, and the fruit grown in the gardens was sold for the benefit of Government.

21. In 1826 the Kutub Minar was repaired, by order of ^{Kutub Minar, 1826.} the Government of India, by Major Smith, R.E. (Governor General Earl Amherst).

22. Between the years 1828 and 1835, when Lord William ^{Taj, 1828-35.} Bentinck was Governor General of India, the Taj was on the point of being demolished for the value of its marbles; and it was in 1831 proposed to lease the Sikandra Gardens to the Executive Engineer at Agra for the purposes of speculative cultivation.

23. In 1840 the local agents at Agra reported that the ^{Taj revenues.} Taj revenues from villages yielding Rs. 4,200 per month were at the time of the British occupation applied to the general purposes of the State.

24. During the Governor Generalship of Lord Auckland, ^{Itmad-ud-Dowlah's Tomb, 1842.} in 1842, the local agents at Agra were directed to assume charge of Itmad-ud-Dowlah's Tomb, and keep it in repair.

25. In 1843 Viscount Hardinge authorised the local agents at Agra to disburse Rs. 150 for the repairs of Itmad-ud-Dowlah's Tomb; and in 1847 his Government directed ^{Tomb of Salim Chisti, Fatehpur-Sikri, 1847.} the Collector to bring the villages connected with the shrine of Shaikh Salim Chisti at Fatehpur-Sikri on to the rent-roll of the district.

26. About 1848 Captain Gill was employed in making faithful transcripts of the wonderful paintings in the Caves ^{Copies of Ajanta paintings, 1848.} of Ajanta.

27. In 1848 Sir Barthé Frere, then Resident at Satara, ^{Bijapur, 1848.} instituted a survey of the Muhammadan remains at Bijapur, and Captain Hart, of the Bombay Engineers, had charge of the work.

Salim Chishti's Tomb,
1850.

28. During Lord Dalhousie's time the Lieutenant-Governor of the North-Western Provinces, in 1850, sanctioned the following distribution of the endowments connected with the Tomb of Shaikh Salim Chisti at Fatehpur-Sikri :—

	Rs.
For festivals	2,327
Repairs	1,500
School	600
Divisible among the Shaikh's descendants ...	6,066
Total ...	10,493
	per annum.

Buildings at
Tatta in Sind,
1855.

29. At the instance of Mr. J. Gibbs, then Assistant Commissioner, and Sir Bartle Frere, then Commissioner of Sind, in 1855, Lord Elphinstone, Governor of Bombay, sanctioned Rs. 5,000 towards the repairs to the Jama Masjid and tombs at Tatta, in Sind (see page xxxvii of the Appendix).

Jama Masjid,
Delhi, 1857.

30. Lord Lawrence in 1857 (Governor General Lord Canning) prevented the Jama Masjid, Delhi, from being razed to the ground.

Colonel Cunningham's
survey, 1862-65.

31. Major-General (then Colonel) Cunningham was appointed Archaeological Surveyor in 1862—a post he held up to 1865.

Bijapur re-
pairs, 1863.

32. In 1863, Sir Bartle Frere, when Governor of Bombay, sanctioned an annual grant of Rs. 2,480 for the repairs of the Bijapur remains.

CHAPTER II.

SYSTEMATIC INVESTIGATION OF ARCHITECTURE AND ARCHEOLOGY, SHOWING THE STEPS THAT WERE TAKEN FOR PREVENTING THE DEMOLITION OF MONUMENTS AND FOR SECURING THEIR CONSERVATION BETWEEN THE YEARS 1865 AND 1881.

33. In 1866 and 1867, the late Sir Henry Cole, then Secro-^{Sir Henry Cole, 1866.} tary of the Science and Art Department and Director of the South Kensington Museum, London, instituted enquiries as to the means of systematically collecting illustrations of Indian architecture (in lieu of originals) by means of photography, plans and casts (see Appendices A and B, page i); and a lecture on the study of Indian architecture was read by Mr. J. Fergusson at the Society of Arts, London, on^{Mr. Fergusson's lecture, 1866.} the 19th December 1866, Sir James Fergusson being in the chair (see page lxxxi of the Appendix, M).

34. The following year at the Paris Exhibition of 1867, a^{Convention for the interchange of reproduction.} large collection of photographs created great interest for Indian architecture, and during this Exhibition a Convention was entered into by the several Princes of the reigning families of Europe, whereby they agreed mutually to assist the museums of Europe in procuring casts and copies of national objects for the promotion of art (see Appendix C, page iii).

35. The first movement for the systematic preservation^{Repairs at Ahmedabad, 1867.} and illustration of monuments in Bombay was directed by the Government of India in August 1867; repairs of buildings at Ahmedabad were taken in hand—a sum of Rs. 5,300 being sanctioned for the Tomb of Shah Alam, and Rs. 5,000 for repairing the buildings at Sirkhej.

36. In 1868 Sir Stafford Northcote suggested to the Gov-^{Survey in Madras, Bombay, Bengal, and North-Western Provinces, 1868.} ernment of India to conserve and record the most remarkable monuments in the country, and enclosed in his despatch a letter from the Director of the South Kensington Museum asking for greater details regarding the date, construction, ornamentation, and condition of ancient buildings. Survey

parties were accordingly sanctioned for Madras, Bombay, Bengal, and the North-Western Provinces, and the following steps were taken :—

- Madras,
1868. 37. In Madras, Lord Napier initiated the restoration of Triml Nayakka's Palace, and its utilisation for public offices. Mr. Chisholm prepared estimates and plans.
- Bombay,
1868. 38. In Bombay, a party from the School of Art (under Mr. Terry) made casts at the Temple of Ambernath.
- Bengal,
1868. 39. In Bengal, the Calcutta School of Art (Principal Mr. Locke) prepared casts of temples in Cuttack.
- N. W. P.,
1868. 40. In the North-Western Provinces an archaeological survey was instituted (see Appendices D, E and F, pages v to xii).
- Sanchi Tope,
1868. 41. The Government of Sir John Lawrence prevented the demolition of the Sanchi Tope Gateways in 1868.
- Ahmedabad
repairs,
1869. 42. In 1869, Rs. 3,000 was sanctioned by the Bombay Government for the repair of the Palace and Tank at Sirkhej, Ahmedabad.
- Sanchi casts,
1870. 43. In 1870, in Lord Mayo's time, casts were made of the Eastern Gateway of the Sanchi Tope and other sculptures (see Appendix F, page xiii).
- Kutub and
Fatehpur-
Sikri casts,
1871. 44. In 1871, casts were made at the Kutub, Delhi, and at Fatehpur-Sikri, Agra.
- Director
General of
Archæology. General Cunningham was appointed this year to be Director General of Archæology.
- Ahmedabad
repairs,
1871-72. 45. In 1871-72, Rs. 2,000 were expended by the Bombay Government on the Tomb and Mosque of Rani Sipri, Ahmedabad.
- Gingri Fort,
1872-73. 46. In 1872-73 repairs were carried out to the old Fort and Temples at Gingri in South Arcot, Madras.
- Copies of
Ajanta
paintings,
1873. 47. In 1873, Mr. Griffith, of the Bombay School of Art, made copies of the coloured decorations in the Caves of

Ajanta. (Those done by Captain Gill had been burnt at the Crystal Palace fire.)

48. In 1873, Lord Northbrook promulgated an order that buildings of interest should be cared for, as a matter of duty, by all Local Governments.

Lord Northbrook's General Order, 1873.

Dr. Burgess was this year appointed Archaeological Reporter to the Bombay Government.

Archæological Survey, Bombay.

49. In 1874 preservation of historical monuments in India was advocated by a memorial signed by—

Memorial in favour of preservation, 1874.

Duleep Singh.

W. Ebor.

Devonshire.

Lothian.

Salisbury.

Ripon.

Durby.

Stanhope.

Carnarvon.

Stanley.

Russell.

Lawrence.

Napier and Ettrick.

Halifax.

Edward Colebrooke.

James Ferguson.

H. B. E. Frere.

J. A. Froude.

W. M. Gomm.

Arthur Gordon.

A. Grote.

A. B. Beresford Hope.

Henry Holland.

Charles Kingsley.

James Th. Lonsdale.

J. G. Shaw-Lefevre.

Stafford Northcote.

Lawrence Peel.

A. P. Phayre.

Edward Ryan.

Albert Sassoon.

G. Gilbert Scott.

Arthur Stanley.

George Edmund Street.

Meadows Taylor.

Edmund Thomas.

C. E. Trevelyan.

50. A special Archaeological Division was established at Agra in 1875 by Sir John Strachey, Lieutenant-Governor of the North-Western Provinces (Viceroy Lord Northbrook).

Sir John Strachey's Archaeological Division, 1875.

51. In 1876-77, the Local Fund Board, North Arcot, Madras, allotted Rs. 1,000 for the repair of the old Palace at Chandragiri.

Palace at Chandragiri, 1876-77.

52. About 1877, Colonel Sankey, R.E., carried out some repairs to the famous temple of Hallabid in Mysore, and a

Repairs in Mysore, 1877.

sum of about Rs. 6,000 was spent. About Rs. 3,000 were also spent in repairing the porch of the beautiful temple at Somnathpur in Mysore.

Mr. Sewall at
Amravati,
1877. 53. In May 1877, Mr. R. Sewell superintended some excavations at the Amravati Tope, Madras.

Hins at Bij-
anagar, 1878. 54. In 1878 removal of vegetation was ordered by the Madras Government from the ruins of Bijanagar (Hampi), Madras.

Vellore Fort,
1878. 55. The idea of restoring the temple in the Vellore Fort was initiated in 1878 by the Duke of Buckingham.

Lord Lytton's
grant to the
N. W. P.,
1879. 56. A sum of 3½ lakhs of rupees was in 1879 contributed by Lord Lytton's Government towards the restoration of buildings in the North-Western Provinces.

Major Mant,
1879. 57. In 1879, Major Mant was appointed Conservator of Archaeological and Architectural Remains in Bombay by Sir Richard Temple, and reported on the buildings at Ahmedabad.

Proposed ap-
pointment of
a Curator in
India, 1880. 58. Lord Lytton's Government in 1880 proposed the appointment of a Curator of Ancient Monuments in India to the Secretary of State (the Marquess of Salisbury).

Duke of
Buckingham
at Bijanagar
in 1880.
Lieutenant
Amravati,
1880. 59. In 1880, the Duke of Buckingham inspected the ruins at Bijanagar, Madras, and ordered some preservative measures. His Grace also ordered the completion of the excavations, commenced in 1877, at the Amravati Tope, Madras.

Bengal and
Buddha Gya.
60. Sir Ashley Eden in 1880 commenced the restoration of the Great Buddhist Temple at Buddha Gya, Bengal.

Curator ap-
pointed by
Lord Ripon,
1881. 61. The Marquess of Ripon in 1881 appointed the Curator of Ancient Monuments in India.*

Madras
Archaeologi-
cal Survey. Dr. Burgess was this year appointed to the Archaeological Survey of Madras.

* The following special officers are now engaged on works of conservation :—
Bengal.—Mr. Beglar, Executive Engineer, Buddha Gya.
North-Western Provinces and Oudh.—Mr. Heath, Executive Engineer,
Archaeological Division.
Panjab.—Lieutenant Albett, B.E., Assistant Engineer.
Central India.—Major Keith, Assistant to the Curator of Ancient Mon-
uments.
Madras.—Mr. Black, Assistant Engineer.

CHAPTER III.

GENERAL OBSERVATIONS ON THE CONSERVATION OF HISTORICAL MONUMENTS.

62. It may be said that investigation has from the earliest times received on all sides great attention and encouragement. So much, however, remains to be done, particularly in the direction of accuracy, and the interest so increases with the increasing knowledge, that preservation of historical landmarks acquires an importance most difficult to ignore. Investigation greatly encouraged.

63. Experience has shown that the keenest investigators have not always had the greatest respect for the maintenance of monuments. Archaeological research has for its object the elucidation of history, and to an enthusiast the temptation to carry off a proof of an unravelled mystery is undoubtedly great. If there were no such things as photographs, casts, and other means of reproducing archaeological evidence, the removal of original stone records might perhaps be justified. Investigation.

64. Sometimes, indeed, the removal of ancient remains is necessary for safe custody; and in the case of a foreign country we are not responsible for the preservation *in situ* of important buildings. We are not answerable for keeping Grecian marbles in Greece; neither were we concerned for the rights of Egypt when Cleopatra's Needle left Alexandria for the Thames embankment. Justifiable removal of remains.

65. In the case, however, of India—a country which is a British possession—the arguments are different. We are, I submit, responsible for Indian monuments, and that they are preserved *in situ*, when possible. Moreover, as Mr. Fergusson remarks, Indian sculpture is so essentially a part of the architecture with which it is bound, that it is impossible to appreciate it properly without being able to realise correctly the position for which it was originally designed (see Appendix B, page iii). Preservation in situ in India.

66. To meet the wants of museums out here and in Europe, perfect *facsimiles* can take the place of the originals (see Facsimiles of sculptures.

Appendices A, B and C, pages i to v). Casts are made so exactly like the sculptures, that no argument against them is of force. I hope before long the Supreme Government will announce all over India the acceptance of the "*in situ, if possible, principle*." Each case should be judged on merits; but I submit that no demolition of importance should be allowed without the express concurrence of the Governor General in Council.

Stonehenge. 67. The removal, for instance, of Stonehenge to London would, I imagine, provoke considerable excitement in England, and be condemned by a majority in the scientific and artistic world.

Custody, &c. 68. Outside the professional and technical remedies necessary to restore and repair national monuments, there are the important but simple measures of custody and the removal of ever-busy natural vegetation. These remedies should, I submit, be strongly recommended, by Local Governments and Administrations, to all district officials, who might, with great advantage, be invited to submit their proposals for providing custodians, wherever they consider them advisable.

Local interest. 69. The encouragement of local interest in monuments is the more essential to secure the fabrics from damage, as without widespread organisations no measures for repairs or restorations can combat with the peculiar tropical conditions tending to damage every kind of building and structure in India.

Publication of drawings. 70. In November 1881, I addressed the Supreme Government on the subject of the reproduction of architectural illustrations, and asked for a sum of Rs. 5,000 in order to get a selection of the drawings under preparation repeated by the best processes for publication (see page lxxiv of the Appendix). Government in reply stated that no large or expensive work was contemplated, but sanctioned a sum of Rs. 5,000 for the reproduction of some of the most finished drawings prepared in my survey for the preservation of any monuments of great importance, adding that the measure should be considered simply as an experiment.

Experimental reproductions of drawings. 71. The results of these experimental reproductions are submitted with this report, and will be referred to in the

detailed reports on the buildings in the various administrative areas. The memoranda drawn up by me at various times (see Appendices G and L, pages xvii and lxxiv) show the value I attach to such means for promulgating a knowledge of Indian art, and I can only hope that Government will deal liberally with the subject. Apart, however, from the value of illustrative matter in connection with the development of art, the publication of *accurate* plans and drawings of a neglected monument of interest and beauty is an important lever for securing a better state of things.

72. A sum of Rs. 50,000 was held in reserve by the Public Works Department in 1881-82 for grants-in-aid towards repairs, &c.; and in the civil estimates for 1882-83 there is a provision of Rs. 1,00,000 for the same purpose. It was further arranged that the former sum should be available for reappropriation. This is the more necessary, as hurry in spending an annual grant before the 31st March would certainly have a bad effect on the quality of work, which in an artistic building should be first rate. I hope, therefore, that similar arrangements will be made for all grants. In connection with the principle of applying these Imperial grants, there is a point which I strongly commend to the notice of Government. This aid should, I urge, be given *when necessary* to the *most important monuments of their class*. There are certain well-known structures and remains of imperial interest and importance, the conservation of which should be encouraged or provided for at the outset.

73. If Local Governments and Native Rulers find it impossible to furnish the whole of the necessary funds, the sum required to make good the total necessary expenditure should, as far as possible, be forthcoming out of the Imperial Treasury.

74. The acceptance of this view would permit of a definite allotment to buildings admitted by the highest authorities to be of importance (see my report of 10th May,

Appendix H, ii, page xxxiv), and I have no hesitation in recommending that the necessary funds be allotted on such a principle to the most important of the following not already provided for:—

75.

*BUDDHIST MONUMENTS.*Buddhist
monuments

Sanchi Tope—Central India, Bhopal State. Date of tope, 500 B.C. ; of railing, 250 B.C. ; of gates, 10-40 A.D. I made casts here in 1869, and had the place surveyed in 1880. Repairs have commenced under Sir Lepel Griffin, Agent to the Governor General in Central India. A great deal is required to be done.

Buddha Gya—Bengal, Gya District. Date of rail, 250 B.C. ; of temple, 500 A.D. I have been here. The temple and rail have been restored by the Bengal Government at great cost, but well done. Executive Engineer—Mr. Beglar.

Bharhut Tope—Central India, Rewa State. Date of rail, 200 B.C. Part of the rail and one gate were removed to the Calcutta Museum by General Cunningham. I have not been to Bharhut yet.

Gandhara Topes and Monasteries—Punjab, Peshawar District. Sculptures date between 50 B.C. and 150 A.D. A great number of them have been excavated from the ruined buildings, and taken to Calcutta and Lahore. I have visited some of the most important localities. Repairs are not possible. The only remedy is to remove sculptures out of reach of the fanatical Pathan.

Manikyala Tope—Punjab, Rawalpindi. Date of the tope, first century A.D. It was repaired in 720 A.D. I saw this monument in 1868, but do not know its present condition.

Amravati Tope—Madras, Kistna District. Date of the railing, about 300-400 A.D. A large number of the railing marbles have been removed. I am about to inspect those that remain.

Sarnath Tope—Bengal, Benares District. Date of tope, about sixth century A.D. I have visited this. Repairs are under the consideration of the North-Western Provinces Government.

Bhaja Chaitya Cave—Western Ghâts, Bombay.

Bedsa Chaitya Cave—Western Ghâts, Bombay.

Nassick Chaitya Cave—Date 129 B.C., Western Ghâts, Bombay.

Ajanta Chaitya Cave—Date about 100 B.C., Nizam's Territory.

Karli Chaitya Cave—Date 78 B.C., Western Ghâts, Bombay. I have been to Karli. Some repairs have been sanctioned by the Bombay Government.

Ajanta Vihara Caves—Date 1-300 A.D., Nizam's Dominions. I have not been to Ajanta, but the Nizam's Government has fitted the caves with doors in order to keep out bees and animals and so preserve the old frescoes.

Ellora Vihara Cave and Kailas—Nizam's Dominions. I have not been to Ellora yet.

76. . JAIN MONUMENTS.

Dilwarra Temples—1032 to 1247 A.D., Rajputana, ^{Jain monu-}Mount Abu. I have seen these. Repairs are very much ^{ments.} required to preserve the beautiful marble sculptures.

Temples at Parisnath—1139 A.D., Bengal, Bhawalpore Division. I have not been here yet.

Temples in Fortress Gwalior—Central India. I have been here. Repairs have been executed by Major Keith, on special duty under the Agent to the Governor General, Central India.

Temples at Khajuraho—Central India. I have not been here yet.

Towers of Victory and Temples at Chittor—806 and 1439 A.D., Rajputana, Meywar State. I have seen Chittor, and have just examined the buildings for repairs (August 1882).

77. *HINDU OR BRAHMINICAL MONUMENTS.*

Hindu monuments.

Temple at Pandrethan—913 A.D., Kashmir. I surveyed this in 1868. It is sadly in need of repair.

Temples at Avantipur—875 to 904 A.D., Kashmir. I surveyed these. They should be looked after.

Temple at Marttand—Kashmir. I have surveyed this. It requires looking after.

Temples at Wangat—Kashmir. These require looking after badly. A survey was made in 1868.

Seven Pagodas—Madras, Chingleput. I have seen these; they require more remedies. Some have been already executed by the Madras Government.

Temple in the Vellore Fort—Madras, North Arcot District. Has been well restored by Captain McNeil Campbell, R.E. I have seen this.

Temples at Srirangam—Madras, Trichinopoly District. Are endowed and used. I have seen them, and surveyed the buildings. They require considerable remedies.

Temple at Madura—Madras, Madura District. Is endowed and used. I have surveyed this, to show needful repairs.

Temple at Ramissiram—Madras, Madura District. This has been surveyed for repairs.

Temple at Tanjore—Madras, Tanjore District. I have seen this. It is kept in fair order by the Princess.

Temple at Kombakonum—Madras, Tanjore District. I have seen this; it requires attention. It is endowed and used.

Temples at Chillambaram—Madras, South Arcot. Are endowed and used. I have been here. The buildings require attention.

Temples at Congeveram—Madras, Chingleput District. I have been here. The temples are endowed and used; they require attention.

Temples and Buildings at Bijanagar (Hampi)—Madras, Bellary District, 1540 A.D. These are deserted, and call for considerable attention. I have inspected the buildings, &c. The Governor of Madras, the Right Honourable Mr. Grant Duff, is about to visit them.

Temples at Nagda near Udaipur—Meywar, Rajputans. Very fine specimens of Jaina styles. I have just seen these.

Temples at Hallabid—Mysore State, 1145 A.D. Partly repaired by Colonel Sankey, R.E., in 1877. I have not been here yet.

Temple at Somnathpur—Mysore State, 1043 A.D. Partly repaired. I have not been here.

Temple at Baillur—Mysore State, 1114 A.D. I have not been here.

Black Pagoda, Kanarak—Bengal, Orissa; date ninth century. Measures needed. I have not been here yet.

Teli-ka-Mandir (Temple), Fortress Gwalior—Central India; date tenth century. I have been here. The building is in course of complete repair under Major Keith and the Military Works Branch, Public Works Department.

Benares Temples and Ghats—I have been here; the buildings now remaining are mediæval in date; the temples are in use and looked after by the Natives, but many require attention in respect of cleanliness and repair. Some of the ghats have fallen into ruin through bad foundations on the river bank.

Temple at Bindrabun—North-Western Provinces, Muttra District. Repairs commenced by Mr. Growse are still in progress under the Executive Engineer, Archaeological Division, North-Western Provinces, Mr. Heath, but lately the priests whitewashed the interior. I saw the building before repairs in 1868.

Amritsar Temple (Sikh). I have seen this. It is repaired very well by the Sikhs. A complete survey has been made at the request of Sir Robert Egerton, the late Lieutenant-Governor of the Punjab.

78.

HINDU PALACES.

Hindu
palaces.

Madura—Madras. Very fine building. Is being repaired for offices under Mr. Chisholm, Consulting Architect to the Madras Government. I have seen this.

Tanjore—Madras. Used by the Princess of Tanjore. I have seen this.

Gwalior Fortress—Central India. Fine buildings, in course of being repaired under Major Keith, on special duty under the Agent to the Governor General in Central India. I have inspected this often. Plans are making in my office.

Udaipur—Meywar, Rajputana. Used by the Maharana. I have just inspected this.

Uthwar—Rajputana. Used by the Maharao-rajah. I have seen this. Nothing done as yet.

Amber—Rajputana, Jaipur. Requires repairs. I have seen this. I regret to record that the Palace was whitewashed to receive the Viceroy in 1881. No repairs have been done as yet.

Dig—Rajputana, Bhartpur. In good order. I surveyed this in 1808.

79.

MUHAMMADAN MONUMENTS.

Muhammadan
monuments.

Kutub Buildings—Punjab, Delhi District. Require some attention. I made casts here in 1870. Surveys of some of the buildings have been made. Much required to be done.

Mosque at Ajmir—Rajputana. Has been partly repaired. Slight repairs still wanted. I have often inspected this building.

Mosques at Jaunpur—North-Western Provinces, Jaunpur District. I have been here. Repairs are sanctioned under Mr. Heath, Archaeological Division, North-Western Provinces.

Ahmedabad Buildings—Bombay, Ahmedabad. I have seen these. Repairs were commenced in 1867 under the Collector, Mr. Borrodaile. They require and thoroughly deserve systematic repair.

Mandu Buildings—Central India, Dhar State. I have inspected these and had a survey made. They require systematic repairs, of which the Maharaja has already initiated some.

Gaur Buildings—Bengal, Malda District. I have not been here yet. The jungle was some time ago cleared by Government. A good deal is required to be done.

Kalburgah Buildings—Nizam's Dominions. I have inspected these. The Nizam's Government has sanctioned repairs.

Bijapur Buildings—Bombay, Kaladgi District. I have inspected these. Repairs were initiated by Sir Bartle Frere when Governor of Bombay in 1863. The citadel buildings are now being converted into offices for the district by Mr. Reinold, Executive Engineer, Kaladgi. Much remains to be done to the architectural monuments.

Mosques and Tombs at Tatta—Bombay, Sind. I have not yet seen these. They were repaired in 1855 under the auspices of Mr. Gibbs.

Shir Shah's Tomb at Sasseram—Bengal, Shahabad District. Repairs commenced by the Bengal Government. Executive Engineer—Mr. Beglar.

Akbar's Tomb, Sikandra—North-Western Provinces, Agra District. I have often seen this. It has been renovated by Mr. Heath, Executive Engineer, Archaeological Division, North-Western Provinces, and the walls and gates are nearly complete. Mr. Lawrence, Collector of Agra, has restored the grounds.

The Taj, Agra—North-Western Provinces, Agra District. I have often seen this. It has been perfectly restored by Mr. Heath, Executive Engineer, Archaeological Division, North-Western Provinces. The gardens are in first-rate order under the Collector of Agra, Mr. Lawrence.

Jahangir's Tomb, Lahore—Punjab. I have surveyed this. Repairs that were urgently wanted have been commenced by the Punjab Government.

80. *MUHAMMADAN PALACES.*

*Muhamma-
dan palaces.*

Agra—North-Western Provinces. I submitted a report to Sir William Muir in 1868. The buildings of interest have been completely repaired by Mr. Heath, Executive Engineer, Archaeological Division, North-Western Provinces.

Delhi—Punjab. A great deal has to be done. I have surveyed some of the buildings. Repairs have commenced.

Lahore—Punjab. A great deal has to be done. I have had some of the buildings surveyed.

Jahangir's Palaces in the Daolat Bagh at Ajmir—Rajputana. I am having a survey made of the buildings to show needful repairs.

Akbar's Palace at Fatehpur-Sikri—North-Western Provinces. I surveyed this in 1869, and made casts in 1871. Repairs have since 1875 been carried out under Mr. Heath, Executive Engineer, Archaeological Division, North-Western Provinces, and are nearly completed.

81. As already stated in my report (Appendix H, page xx, paragraph 2), architectural monuments have suffered, and are suffering, more from the acts for which Government has been responsible than from the natural decay and ruin produced by rain or vegetation in the jungle and deserted places. The remedies, which are to be applied at Lahore and Delhi, will make good damage done for the most part in the early days of British rule.

82. A list of interesting British monuments worthy of preservation is given in the Appendix N, page cvi; also a list of some ancient and modern forts and citadels in India in Appendix Y, page ccxvi.

H. H. COLE, *Captain, R.E.,*
Curator of Ancient Monuments in India.

December 25th, 1882.

APPENDIX.

A

Extract from a Memorandum offering suggestions for collecting information about the ancient architecture of India, by Lieutenant H. H. Cole, R.E., dated Naini Tal, June 1887.

A collection of records of Indian architecture could only be represented in England, by photographs, drawings, plans, casts and written descriptions.

In order to render the collection purely instructive, details of buildings should be accurately represented.

2. Apart from the value of representing Indian architecture for study in England, there would be a good opportunity for representing, at various museums in India, a History of Native Architecture; the education of natives, whose modern art is daily becoming more and more corrupted and all originality and identity being lost, is a matter worthy of serious consideration.

B

Memorandum by James Fergusson, Esq. (1888), regarding objects in India of which it is desirable casts should be obtained.

There are in the Museum of the Royal Asiatic Society at Calcutta and the Central Museum at Madras a considerable number of pieces of sculpture, some of great beauty and interest, of which it would be desirable casts should be obtained for museums in this country. There must be parties on the spot who knew which are best and most suitable,* but it strikes me as extremely desirable that the parties who are to be employed in casting the larger objects *in situ* should first be employed on these smaller antiquities in the local museums.

In the Lahore Museum there is a considerable collection of sculptures obtained from Topes in Afghanistan, principally from the neighbourhood of Peshawar, of the Bactro-Indian period, which are of extreme beauty and interest. I should like to see the originals sent to this country. The next best thing, of course, would be casts of them.

I am not aware what antiquities may be collected in any museum in Bombay, but I fancy there must be a considerable number, some of which at least may be worthy of being so multiplied.

Bengal.—The objects in this Presidency of which, in my opinion, it would be most desirable to obtain casts, are some of the sculptures in the caves at Udyagiri in Orissa, not far from Cuttack.

* If any of the sculptures or inscriptions from the Amravati Tope which were deposited in the Calcutta Museum by Colonel Mackenzie are still there, casts of them would be most desirable to complete the collection here.

The two best are the bas-reliefs in the Jodev and Ganesh Garbha Caves. These are figured in the Journal of the Asiatic Society of Bengal, vol. vii, pls. xiii and xlv. They are about 3 feet in height, and the one 20, the other, I guess, 30 feet in length. They are placed under cover in verandahs about 7 feet from the ground, and therefore very accessible and, being in low relief, easily cast.

There are other sculptures in other caves in this locality which may be worthy of being cast.

These two were the only caves accessible when I was there, and they are among the oldest and most interesting objects in India. They probably date before the Christian era.

The black Pagoda at Kamru is not far from these caves, and is one of the best and most elaborately sculptured monuments in India. If a party were in that neighbourhood and had time they might find numerous objects in that now ruined temple worthy of being cast. It is impossible without photographs or drawings to specify which; but any person in charge of the party ought to have sufficient knowledge of the subject to fix on the best.

Near Ratnagore there is a temple some of the sculptures of which are figured J. A. S. B. vii, pl. xxxii., which from their style are well worthy of being cast; and if access can now be obtained to the precincts of the old Great Temple at Bhuvaneswar, there must be numerous objects within its walls worthy of being cast.

So far as we now know, it is the oldest *Hindu* temple in India, and consequently any information regarding it must be most valuable.

This part of Orissa is full of antiquarian interest, and a party could easily find any amount of employment. So far as I can judge, their relative interest is in the order in which I have named them.

Next in interest to these Cuttack sculptures are the pillars and remains of the rail that once surrounded the Bo Tree at Bodhi Gya in Behar. Some of these are built into the courtyard of the Mahant's house. Others form a sort of porch to the present temple, and some are, I believe, *in situ*. Those which are sculptured are equal in beauty and interest to anything in Bengal.

These pillars are not large—from 6 to 8 feet in height—and could easily be cast whole.

There are also numerous fragments of ancient sculpture in the neighbourhood of Bodhi Gya which are worthy of being cast, but it would require discrimination to say which. The rail is of surpassing interest. It would suffice for the present to photograph the others.

Agra and Delhi.—I am not aware of any objects of Hindu antiquity near these cities which it would be worth while to cast, unless the fragments of the Buddhist rail discovered by General Cunningham at Muttra have been collected in some local museum (Agra?). If casts were taken of them, they would be of great interest.

Among the Mahomedan remains there is little, if anything, after the death of Akbar (A.D. 1605), which is worthy of attention in this respect. After that period inlaying became the principal means of ornamenting, and that cannot be expressed by casts. At the Kootub at Delhi, however, and in the old Pathan tombs and mosques there are carved details of Saracenic ornamentation equal to any found in any part of the world, and the carved geometric ornamentation of Akbar's buildings, both at Agra and Fatehpur Sikri, are unsurpassed of their class. These are all, however, only parts of large architectural designs, and unless copied on a very extensive scale would fail to reproduce the original effect. If, however, casting is undertaken in the North-West, a few small panels and details might easily be selected for experiment at least.

Sanchi.—There is no monument in the Central Provinces of which it would be so desirable to obtain casts as of the gateways at Sanchi. Two of these are fallen, and the fragments on the ground are not only easily accessible, but could without difficulty be pieced together so as to make a complete restoration afterwards. If one only were undertaken, probably the southern would be the best. If part being still erect were no objection, the eastern is probably of greater interest.

There is also the gateway of the smaller Tope a few yards to the north of the great one, which is on a much smaller scale. Only one trifolium of this is standing, the rest in the ground. If the erect portion of a part was no objection, its smaller scale would make this more desirable as an experiment. The sculptures are of equal interest to those of the others.

Bombay.—Some of the sculptures in the great cave at Elephanta are typical of their class, and of great interest to the study of Indian antiquity. The choice of those to be first operated upon would in a great degree depend on their state of preservation, and that can only be settled on the spot.

The double Elephant Capitals in the great cave at Karli are objects of great beauty and interest. One or two of the best of them ought to be cast, and also the capitals in front of the cave at Beda (*J. B. B. R. A. S.*, Vol. I., p. 439).

These places are in the immediate neighbourhood of Bombay and easily accessible by railway, and with smaller details which would suggest themselves to a party on the spot, might easily fill up a season. If operations could be extended to Bhopore or Ahmedabad, there are infinite varieties of Sarnese details which it might be worth while to reproduce by casting. As most of these have been published in the two volumes of photographs bearing these names, any one may satisfy himself on these heads, and I therefore forbear to enlarge on them.

Madras.—I am very much at a loss to know what to recommend with regard to this Presidency. So far as I know, none of the sculpture of the great temples is of so high a character as to be worthy of study, apart from the buildings in which it is found, though very effective while *in situ*.

If a party could be detached to Bellor and Hullalced (see volume of photographs of Dharwar and Mysore), they might find abundance of profitable employment; but this would probably be too much to attempt at first. Barring this, the deserted temple in the fort at Vellore (now the arsenal) affords some of the best and most elaborate pillars of the southern style, and these would be extremely interesting in any collection as a means of comparison.

In conclusion, I beg leave to observe that, unless casts of sculpture *in situ* are accompanied by plans and measured drawings in elevation, they will lose half their value. Indian sculpture is so essentially a part of the architecture with which it is found, that it is impossible to appreciate it properly without being able to realise correctly the position for which it was originally designed.

I may also add that no party should be despatched on such an expedition unless accompanied by a photographer. Forty negatives will probably not cost more than one cast; and though they cannot supply its place, the larger field they cover and the number of incidental details they include render them invaluable adjuncts, and then also bring home to us an infinity of information regarding the antiquities which no amount of casting is likely to afford, in our days at least.

Convention for promoting universally Reproductions of Works of Art for the benefit of Museums of all Countries.

Throughout the world every country possesses fine historical monuments of Art of its own, which can easily be reproduced by casts, electrotypes, photographs, and other processes, without the slightest damage to the original.

(a) The knowledge of such monuments is necessary to the progress of Art, and the reproduction of them would be of a high value to all museums for public instruction.

(b) The commencement of a system of reproducing works of Art has been made by the South Kensington Museum, and illustrations of it are now exhibited in the British Section of the Paris Exhibition, where may be seen specimens of French, Italian, Spanish, Portuguese, German, Swiss, Russian, Hindu, Celtic, and English Art.

(c) The following outline of operations is suggested:—

i. Each country to form its own Commission according to its own views for obtaining such reproductions as it may desire for its own museums.

ii. The Commissions of each country to correspond with one another and send information of what reproductions each causes to be made, so that every country, if disposed, may take advantage of the labours of other countries at a moderate cost.

iii. Each country to arrange for making exchanges of objects which it desires.

iv. In order to promote the formation of the proposed Commissions in each country, and facilitate the making of the reproductions, the undersigned members of the reigning families throughout Europe, meeting at the Paris Exhibition of 1867, have signified their approval of the plan and their desire to promote the realisation of it.

The following Princes have already signed the Convention:—

Great Britain and Ireland	...	ALBERT EDWARD, Prince of Wales.
" " "	...	ALFRED, Duke of Edinburgh.
Prussia	...	FREDERICK-WILLIAM, Crown Prince of Prussia.
Hesse	...	LOUIS, Prince of Hesse.
Saxony	...	ALBERT, Prince-Royal of Saxony.
France	...	PRINCE NAPOLEON (JEROME).
Belgium	...	PHILIPPE, Comte de Flandre.
Russia	...	THE CÉSAREWITCH.
"	...	NICOLAS, Duc de Louethenberg.
Sweden and Norway	...	OSCAR, Prince of Sweden and Norway.
Italy	...	HUMBERT, Prince Royal of Italy.
"	...	AMADEUS, Duke of Aosta.
Austria	...	FRANZ-JOSEPH, Archduke of Austria.
"	...	RAISER, Archduke of Austria.
Denmark	...	FREDERICK, Crown Prince of Denmark.

Semi-official letter from His Royal Highness the Prince of Wales, to His Grace the Duke of Marlborough, Lord President of the Council of Education, dated 12th March 1868.

During the Paris Exhibition a Convention was entered into by the several Princes of the reigning families of Europe, whereby they agreed mutually to assist the museums of Europe in procuring casts and copies of national objects for the promotion of Art. I cannot doubt that the museums in this country will derive benefit from this Convention, and will be able to make a return to foreign

countries for the advantages which they may afford. I therefore transmit to your Grace, as Lord President of the Council, copies of this Convention, and I request that you will have the kindness to inform me whether you see any objection to the Lord President acting through the Science and Art Department in this country for the purpose of giving effect to it, so far as the United Kingdom is concerned.

Your Grace will perceive that the object contemplated by the Convention is identical with that for which an annual grant of money has been made for many years by Parliament to the Science and Art Department, and it is hoped that by the aid of this Convention far greater facilities will be obtained for the interchange of works of Art between this and other countries than have hitherto existed.

10, St. James' Square,

March 14, 1868.

SIR,

I have had the honour to receive your Royal Highness' letter of the 12th March, informing me that a Convention had been entered into by several Princes of the reigning families of Europe, whereby they agreed mutually to assist the museums of Europe in procuring casts and copies of national objects for the promotion of Art, and at the same time transmitting to me copies of this Convention, and enquiring if I see any objection to the Lord President acting through the Science and Art Department in this country for the purpose of giving effect to it, so far as the United Kingdom is concerned.

In reply, I beg leave to inform your Royal Highness that I shall have pleasure in acting in the manner proposed, so far as the institutions under the Science and Art Department are concerned; and that when called upon I shall be ready to communicate with other authorities having charge of objects of Art in the United Kingdom, with the view of obtaining any facilities which may be required by foreign countries.

I have, &c.,

(Sd.) MARLBOROUGH.

His Royal Highness

The Prince of Wales.

D

Report on the Fort Buildings at Agra, by Lieutenant H. H. Cole, R.E., dated Cawnpore, 4th August 1868.

In accordance with the instructions conveyed in Resolution No. 3133 of 1868, dated 13th June, by His Honour the Lieutenant-Governor, North-Western Provinces, I inspected the buildings in the Fort at Agra, and have the following report to make:—

Report.

1. The buildings which should be preserved from decay are—

The Jahangir Mahal.
 " Diwan-i-Am.
 " Khwa Mahal.
 " Diwan-i-Khas.

The Saman Barj.
 " small mosque near the Diwan-i-Am.
 " Moti Masjid.

And the Copola and Chittore Gates in the Machi Blawan should be removed and built up elsewhere in the Fort.

2. The Jahangir Mahal was built by Akbar, and consists of one pavilion, singularly elegant in design. It is of red sand-

Akbar, 1556-1605.

stone, and all the ornaments are honestly carved in relief on the stone. The interior details are all Hindu, and characterised by that peculiar aversion to an arch which Akbar alone of all the Moslem monarchs seems to have adopted. Jahangir chose this building as the residence of his two Hindu wives,

Jahangir, 1605-1627.

the princesses of Amber (ancient name for Jaipur) and Marwar. And this evidence of kindly feeling to the Hindus lends additional interest to the building, and affords sufficient reason for its maintenance as a historical as well as an architectural monument. At present it is little better than a ruin, which climate and neglect combine to make worse. The whitewash which is liberally laid on in the north court should be removed, and the whole of the existing stone-work rendered secure by iron cramps run with lead. I think that any attempt to restore the building would prove at once difficult and expensive, and that the work of maintenance should be limited to preserving the present standing parts, and no attempt made to replace the fallen stone-work which now lies heaped in the centre of the court. At present the rain finds easy access through upper windows on to the floor of the north gallery, and, percolating through the stone floor, has destroyed the coloured ceilings and produced great decay. Water oozes through the flat roof all round the central court; grass and weeds crop up everywhere; and the sweeper of a neighbouring sergeants' quarters finds the parapet of the roof overlooking the interior court a convenient asylum for all kinds of refuse.

3. Close to and on a level with the roof of the Jahangir Mahal is a very interesting Hindu pavilion in fair repair. The whitewash should be removed, and the roof strengthened with cramps and cement.

4. Close to this are some tanks, which were used to fill the baths belonging to Shah Jahan's palace and harem, and to supply the palace fountains. There are several pipes

Shah Jahan, 1627-1658.

leading from the side of the tank, above which the names of the baths or fountains they supply are carved in relief on circular discs of stone. These tanks should be kept in repair, and rendered accessible to the public.

5. The Diwan-i-Am (or audience chamber) was built by Shah Jahan, and is now used as an armoury. To adapt it to the requirements of the latter, windows of a European pattern have been built in on the west front, and the whole of the interior whitewashed; so that little remains of its former splendour. It is, however, in good repair.

6. I now now come to the marble buildings—namely, the Khas Mahal, the Saman Burj (or harem), and the Diwan-i-Khas (or private hall of audience)—which, together with the Diwan-i-Am, formed Shah Jahan's palace, and were built by that Emperor in white marble, inlaid with precious stones. In front of the Khas Mahal is a garden, surrounded on three sides by colonnades not so remarkable for architectural beauty as for the extreme decay into which they have fallen. The marble building consists of three pavilions overhanging the river, and, together with its terrace and fountain, are in a fair state of repair, and require only to be carefully inspected and the commencement of ruin stayed. The baths on the west side should be preserved, and not suffered to follow the inevitable fate of the adjoining buildings round the garden, near which it is dangerous to stand.

7. Some steps in front of the Khas Mahal lead by underground passages in the direction of the well on the east of the Jahangir Mahal. These passages are blocked up now, but were no doubt used by the ladies of the harem to get to the well, which is very remarkable for the suites of apartments existing round the bottom and on a level with the water. The well and passages should be maintained.

8. The Saman Burj (or private apartments of the harem) overlooks the river. The hole made by one of Lord Lake's cannon-balls in 1803 may still be seen in the marble screen on the west. The beautiful polished marble pillars and elegant arabesques of flowers, inlaid with precious stones, have suffered much through the combined influences of time and the British soldier, the latter having extracted a great number of the stones, and therefore damaged the marble. As far as the safety of this building is concerned, I recommend that the pillars be strengthened with iron cramps and bands, and fallen pieces of marble renewed. I believe that Sir E. Leeds, the Executive Engineer, at one time recommended that the holes caused by the mischievous extraction of stones should be filled up with cement, to enable fresh damage to be discovered. I think, however, that the building would lose a great deal of its interest if this plan were adopted. It would not be so easy to form an idea as to what the inlaid work had been; and, moreover, the very fact of theft having taken place is evidence of the existence of stones sufficiently valuable to steal. These remarks apply equally to the Diwan-i-Khas, which has also been much damaged.

9. With reference to all the marble-inlaid work, I would recommend generally that decay be stopped as far as possible, but that the buildings should be left as much as practicable in their present state. Unless a complete work of restoration be entered into, it would be better to let the public see the buildings as they are, and to leave the softening influences of time to convey a full impression of respect for a bygone age. The inlaid work in the Diwan-i-Khas is very fine, and the building itself is in the best style of Shah Jahan's reign. This building is only accessible by a ladder from the Saman Burj; and when the tumble-down buildings of the Machi Bhawan have been removed or fallen in, there will be no communication, as now, with the Diwan-i-Am. Some means of approach should be provided for the public, and I think the best would be a staircase from the court of the Machi Bhawan. Overlooking the river on the terrace of the Diwan-i-Khas is a large black marble stone, broken at one corner. This is erroneously called 'Akbar's Stone,' and the *raised* inscription round the edge proves that it was for Salim, the son of Akbar, afterwards the Emperor Jahangir; and a more recent cut inscription bears the name of Jahangir, and the numerical value of the letters testify to 1605 as the date. The stone should be mended with iron bands (not bars put into its length, as before). The west gateway of the Machi Bhawan contains some handsome bronze gates which were brought by Akbar from the Fort at Chittore. These should be removed to the Diwan-i-Am.

10. The marble cupola on the east of the Machi Bhawan has been partly taken down, as a measure of safety. It was a work of Shah Jahan's time, and in design is a mixture of Italian and Muhammadan styles. This cupola should be removed to some convenient position in the Fort, as an evidence of the influence of Italian art on the art of Shah Jahan's time. Some deny that the Taj Mahal was designed by an Italian, but I think that the character of this cupola goes far to prove that Shah Jahan employed Italians in the decoration of his buildings. On the west of the Diwan-i-Am is a small white marble mosque, built on the roof of a red sandstone building. Formerly it was in communication with the Saman Burj by a screened passage, which passed along the back of the Diwan-i-Am and over the west buildings of the Angori Bagh. This mosque is in very fair preservation, and should be maintained.

11. The last building worthy of preservation is Shah Jahan's Moti Masjid, one of the most elegant mosques of his time. Its courtyard is of pure white marble, from the pavement to the domes. Vegetation is commencing to destroy the latter, and some cornices in the ceiling of the mosque have fallen down; otherwise the building is in a good state. The best way to secure the ceiling would be to render the roof above perfectly water-tight. The Moti Masjid cost Rs. 3,00,000, took seven years to build, and was completed in 1652.

E

Extracts from a letter from Lieutenant H. H. Cole, R.E., Superintendent, Archaeological Survey, North-Western Provinces, India, to the Under Secretary of State for India, dated London, 24th November 1869.

In accordance with the instructions contained in your letter dated 20th August, I have the honour to submit a revised estimate for the work of casting one of the Sanchi Tope gateways, for the information of His Excellency the Governor General of India in Council. These gateways are of great size and of great interest, as their elaborate sculptures illustrate the history of a period which has few written records.

2. The services of one Corporal and two Sappers of the Royal Engineers have been placed at my disposal. These men are now learning how to take casts by means of Elastic Moulds, Piece Moulds, Clay Squeezes, Paper Moulds, and have been set to cast some pieces of Jain sculpture which embody all the usual difficulties to be met with in Indian carvings. I have also been myself mastering all the necessary practical details of these operations.

3. I have in this way been able to test the relative merits of the various processes as applied to the Buddhist sculpture at Sanchi, and am satisfied that the method of making elastic moulds with gelatine is the one which will produce the most satisfactory results, in respect of perfection of copy, as well as economy.

4. Piece moulding* is too laborious and expensive for so large a work: two whole cold seasons would not suffice to finish one set of moulds of the gateway.

Moulding with clay† is an imperfect method; it takes also too long: and moulding with paper is not only laborious, but does not produce clear or sharp repetition.

On the other hand, the gelatine method insures a most perfect facsimile and can be executed quickly—two qualifications which in the present instance are of paramount importance; firstly, because it is necessary that copies as perfect as possible should be produced for France, Prussia, London, Dublin, and Edinburgh (see extract from correspondence below‡), and secondly, on account of the extent of the work to be accomplished in a limited time during the cold season.

* What can be done with gelatine in one day, takes 14 days to accomplish by piece-moulds. The object will, moreover, be covered with seams or divisions, whilst with an elastic mould the object is cast solid in one piece.

† Clay squeezing occupies double the time taken by gelatine moulding, and produces only the roughest kind of casts.

‡ Extract from letter No. 1043, from the *Official Secretary to the Government of India, to the Agent to the Governor General in Central India, Satul Sirohi, 29th June 1869.*

"5. I am to inform you that steps will be taken to obtain casts of some of the most interesting parts of the Tope, and it is the intention of His Excellency in Council to present a set of the casts to the French Government."

Extract from despatch No. 17 of 1869, from His Excellency the Governor General in Council, to Her Majesty's Secretary of State for India, dated 2nd March 1869.

"It has been brought to our notice that the Committee of the Council on Education in England has recorded a minute, a copy of which we now forward, on the subject of procuring, at the expense of the Science and Art Department, casts of certain portions of the Sanchi Tope, near Ballia, in order that three copies might be forwarded to the United Kingdom,—one for the Museum at South Kensington, one for the Museum at Dublin, and one for the Museum at Edinburgh."

Extract from a letter from the Secretary, Science and Art Department, London, to the Under Secretary of State, India Office, dated 11th February 1869.

"Mr. Cole informs Mr. Gessé Delf that the Prussian Ambassador, instructed by his Government, has applied to the Department to ascertain the probable cost of one cast of the gateway of the Sanchi Tope, the cost of moulds being defrayed either wholly by the Science and Art Department or shared with the Indian Government."

5. Basing my calculations on known data, I find that three men of the Royal Engineers, aided by native modellers, will be wholly engaged during next cold season in obtaining one set of gelatine moulds of the Sanchi gateway.

6. These moulds will not keep, and must be cast from directly they are made.

7. Only one cast can be taken from each mould* and only one set of perfect cast can be produced, from which the necessary copies will have to be cast afterwards.

8. As regards the reproduction of copies, it must be remembered that five are required for Europe (France, Prussia, London, Dublin, and Edinburgh); and probably one, at least, for India. The question is therefore one of economy, time, and certainty of execution; and it will be best in respect of these to send the one cast or rather set of casts numbering about 50 pieces to England, and to reproduce the required number of copies in London, where contracts can be entered into.

9. Unless this were done, the reproduction would have to be delayed until the cold season of 1870; as moulding from fresh casts with gelatine could not be continued in the hot weather; it would also be very expensive to import from London to India all the plaster of Paris required for six copies.† It must be borne in mind that plaster of Paris for casting must be of a superior quality, and has to be imported from France or England, as no means exist in India for refining the native gypsum to the extent required. [I believe plaster of Paris can now be produced in India.—H. H. C., 18-7-82.]

10. The enclosed estimate has been framed to carry out the following course of action.

11. The men of the Royal Engineers will accompany me to Sanchi, *via* Calcutta, this being a more convenient route than *via* Bombay on account of the large quantity of materials that has to be taken, and on account of the existence of railway from Calcutta to Jabalpur, whereas between Bombay and Jabalpur there is only railway as far as Nagpur.

12. During the months of December, January, February, and March, I propose to make one perfect cast [which will consist of about 50 pieces] of the Sanchi Torse gateway.

13. In order to utilise the services of the men of the Royal Engineers to the full, I propose that 2 native modellers from each of the Schools of Art of Calcutta, Madras, and Bombay be sent to aid and be instructed in the work of casting by gelatine. By this means it will probably be unnecessary to retain the services of the men of the Royal Engineers in India, as the native modellers will be competent to execute future casts and instruct others in the process.

14. The one perfect series of casts having been obtained, I propose to return to England with the men of the Royal Engineers to fit the 50 pieces of the parent † cast into their correct places, and to prepare all the necessary details for producing the number of copies from it, as well as erect one model copy.

* When the plaster of Paris has been poured into the mould, it commences to harden, and in the act of setting sometimes hard, which melts the gelatine and destroys the sharpness of the mould, which cannot generally be used for a second cast.

† At least 60 tons of plaster would be required. The freight on this from London averaged at 85 sh. per ton would be £260; the freight on the 5 returned casts back to London 40 tons £110; total £370. To send the parent cast home for reproduction would cost, 3 tons 248. Amount thereby saved £222. These figures do not include the cost of packing the plaster in tin-lined boxes.

‡ The parent cast will have somewhat deteriorated in the process of repetition, as its surface will have been oiled to prevent the gelatine moulds from adhering.

15. The casts will first have to be laid down horizontally on the ground, as the pieces must not be joined, and cannot therefore be built up vertically, until after the moulds for reproduction have been made.

16. As I have already pointed out, the original gateway is of great size, measures upwards of 33 feet in height, and is covered from summit to base with the most elaborate sculptures. The accuracy of all the subsequent copies will therefore depend on that of the parent * cast, and I apprehend that my responsibility in the matter will have ended when the first series of pieces produced from the parent cast have been joined together and built up in their proper places, to serve as a type and model for the proper erection of the other copies.

17. The copy or copies for India can also be most economically produced in England, and on my return to India after the completion of the work in London, I could see that at least one copy was properly erected in India.

18. As the work connected with the casting of the Sanchi Töpe gateway will extend into the financial year 1870-71, I have taken this opportunity of proposing that casts should be made during the cold season of that year of some of the Kutub Pillars at Delhi, and of some pillars and carvings in the palaces at Fatehpur-Sikri, which I have reason to believe will be required by the Science and Art Department for the South Kensington Museum.

19. The whole of the tools at Sanchi will be available for this work, as well as nearly the whole of the gelatine for making elastic moulds, and any surplus amount of plaster will also be serviceable.

20. For convenience and economy I have ordered boxes for the plaster of Paris, of such sizes as to hold the casts of the gateway when ready for removal to England. The cost of these boxes is somewhat high, but they have to be lined with tin to preserve the plaster.

21. The Peninsular and Oriental Steam Navigation Company have agreed to carry the whole cargo of plaster of Paris, gelatine, tools, etc., from London to Calcutta at the rate of £5 6s. per ton (the rate per ton by sailing vessel is about £6 15s., by measurement 27s. per 40 cubic feet), a reduction more than of cost per cent. on their lowest rates, and they further agree to bring back the parent cast of the gateway to England at the same rate, so that, although there has not been time to send the materials *via* the Cape, not much, if any, additional expense will have been occasioned by the necessity of using the overland route.

22. The question of restoring the fallen gateway of the Töpe has formed the subject of some correspondence, and I believe that the matter rests as referred to in the following letter from H. Le P. Wynne, Esq., Under-Secretary to the Government of India, to the Agent to the Governor-General in Central India:—

"No. 1257, dated Simla, July 28th, 1868.

Sir,

I am directed to acknowledge the receipt of your letter marginally noted on the subject of the restoration of the Sanchi Töpe gateway.

2. In reply, I am directed by the Viceroy and Governor General in Council to observe that, as it is in contemplation to despatch a special officer next cold weather, he will have full opportunity of investigating the question as to the possibility of restoring the fallen gateway. That officer will accordingly be charged with this duty also on his proceeding to Sanchi.

I have, &c.,

(Sd.) H. Le P. WYNNE,

Under-Secretary to the Government of India."

23. When I inspected the Sanchi Töpe gateways in April last the south and west gateways were in ruins. I think, however, it would be possible to restore them if the Begum of Bhopal sent about 30 masons and hildars to work under my

* *vide* note 2 on preceding page.

Estimate for the year 1870-71.

Items.	Rs.	A.	P.	Rs.	A.	P.
PART I.—For the first half of the year 1870-71.						
Carriage of cart of the Sewell Gateway from Sanchi to Aulhalpore—12 carts for 15 marches at Rs. 2 each	432	0	0			
Railway to Calcutta, 8 tons, Rs. 42 per ton	336	0	0			
Freight from Calcutta to Lumbini, 8 tons at Rs. 63 per ton	504	0	0			
Shipping and other charges in Calcutta, say	100	0	0			
				1,372	0	0
Travelling expenses	...	...	...	5,260	0	0
Reproduction of cast and six copies in England	...	...	...	10,234	8	0
Total	...	...	...	17,266	8	0
Contingencies	...	...	...	1,700	0	0
Grand Total	...	...	...	18,966	0	0
PART II.—For the latter half of the year 1870-71.						
Cost of surveying the Kutah and other remarkable Delhi monuments, of casting some of the Kutah pillars and examples of Muhammadan architecture at the palaces of Estenpur-Sikri	...	...	...
Materials, plaster of Paris, say	4,000	0	0			
Freight to and from England and general transport expenses	5,000	0	0			
Photographic charges, say 25 negatives at Rs. 40 per negative and 6 proofs	1,550	0	0	9,000	0	0
Salaries	...	...	...	1,250	0	0
Travelling expenses	...	...	...	6,328	8	0
Total	...	...	...	2,440	0	0
	...	...	...	19,328	8	0
Contingencies	...	...	...	1,800	0	0
Grand Total	...	...	...	21,128	8	0

F

Report by Lieutenant H. H. Cole, Superintendent, Archaeological Survey, North-Western Provinces, for the year 1869-70, dated Camp Sanchi, February 1870.

In order to present a connected statement for the year 1869-70, it is necessary for me to give an outline of operations since my first connection with the Archaeological Survey.

2. On September 1st, 1868, I left Cawnpore with two Native draughtsmen, and marched through Murree into Kashmir, and up to the middle of November was occupied in surveying the principal ancient Kashmirian temples. Mr. Burke, photographer

Survey of Kashmir Temples, 1868.

of Murree and Peshawar, accompanied me, and it gives me pleasure to state that he carried out his part of the work in a zealous and successful manner. One returning to India in November, I halted at Sialkot, in order to complete the rough drawings made in the field, also to await further orders.

3. The Government of the Punjab at first wished a continuance of operations in the Salt Range, where several ruins exist similar in character to those I had surveyed in Kashmir.

The Government of the North-Western Provinces, however, required my services, and I left Sialkot for Muttia in order to survey some of the architectural buildings in that neighbourhood. Reaching Muttia on the 9th February 1869, I marched to Bindrabun and opened work at the ancient Hindu temple, called Munder Gobind Deoji. The Reverend Mr. Simpson, Chaplain of Muttia, had been appointed to take photographs, and by a mutual arrangement he visited my camp at Bindrabun, Dig, Govardhun and Fatehpur Sikri, in order to take photographs of those particular portions in the buildings that would best illustrate their architecture. After Bindrabun I visited the temple at Govardhun, and the palaces at Dig and Fatehpur Sikri in succession,—and completed 13 drawings, plans, and details of those buildings. Mr. Simpson took 58 photographs, and these illustrations, together with descriptive notes, are being published in one volume, by order of the Secretary of State for India, at the India Office.

4. The Kashmir photographs and drawings (photographed) are also being published at the India Office in one volume, and this work forms the first in the series of volumes which it is proposed to publish in connection with the operations of the Archaeological Survey. The illustrations are being produced from the original negatives in the Photographic Department of the India Museum by the "autotype" process in carbon, and are therefore permanent. My drawings are also being photographed for purposes of repetition, as well as for convenience to suit the size of the volume.

5. In March 1869, when at work at the palaces of Fatehpur Sikri, I received orders to hold myself in readiness to proceed to England for the purpose of making arrangements for casting one of the stone gateways which surround the great Buddhist tops at Sanchi in Central India, and, in accordance with instructions, I proceeded to Sanchi in order to collect the necessary details concerning the nature and extent of the work.

6. On the 1st of May 1869 I left Bombay, and arrived in London on the 23rd of the month.

The Secretary of State for India sanctioned my engaging three sappers of the Royal Engineers to be trained in the most recent methods of taking casts in plaster of Paris.

The authorities at the South Kensington Museum, London, kindly placed one of their casting workshops at my disposal, and I obtained permission to engage a Mr. Franchi to instruct the three sappers and myself in the various processes of moulding.

Mr. Franchi is frequently employed by the Kensington Museum authorities to take casts of foreign sculptures, and is one of the most expert modellers in London.

It was soon obvious to me that the method of making elastic moulds with gelatine was the most suitable for Indian sculptures, in respect both of economy and rapidity of execution, and the three sappers were set to make casts by this process of a series of Jaina sculptures that had been sent to the Museum by Sir Bartle Frere.

I then made an estimate for casting the Eastern Gateway of the Sanchi Tope, and obtained the sanction of the Secretary of State for India to the purchase of the necessary materials. In addition to the gelatine process, the sappers underwent instruction in piece-moulding, clay-squeezing, and gutta-percha moulding.

I was also occupied, during my stay in London, in making fair drawings from the rough field measurements and drawings of Kashmirian and Muttia buildings, and in arranging, in concert with Dr. Forbes Watson, of the India Museum, for the publication of the two series.

On the 26th October 1869 I left London, and arrived in Calcutta, accompanied by Sergeant Bullen and Corporals Heath and Jackson, of the Royal Engineers, on the 26th November.

I remained in Calcutta until all the 88 boxes, containing 28 tons of material, had left Howrah for Jubbulpore; and on the 18th December I arrived at the latter place, and commenced transferring the boxes into country carts.

It was found that upwards of sixty carts would be required, and I was delayed until the 26th December at Jubbulpore until all had been procured. I then proceeded to march to Sanchi, reaching Danah on the 24th December, Sagar on the 29th December, and Sanchi on the 7th January 1870. Here I found that the

Begum of Bhopal had sent a Tahsildar to assist in procuring coolies, scaffolding, &c., and already a quantity of bamboos, rope, and other requisite material had been collected at the village.

The Tope is situated on a sandstone hill, some few hundred feet above Sanchi; and as there existed no cart road to the top, I had to engage a number of coolies to carry up the material. The carts containing the plaster of Paris, &c., arrived on the 10th January, and from this date until the 17th Corporal Jackson was engaged in having the boxes moved up the hill, whilst Sergeant Bullen and Corporal Heath, assisted by seven native modellers and two mistries, erected a scaffold round the Eastern * Gate of the Tope, and commenced cleaning the carved stone work which had been incrustated with vegetation.

The working tents were pitched close to the gate, and the boxes arranged in them as they came up the hill. On the 10th January the first cast had been made, and the work continued successfully from that date until February the 7th, when I estimated that, out of 757 square feet of carved work to be cast in order to produce a perfect copy of the gate, 477 square feet had been cast, leaving 280 square feet to be done. I also calculated that the average daily work of the whole party of sappers and modellers would be fairly represented by 18 square feet of casting in plaster of Paris.

The whole cast consists of 112 pieces, and the last piece was completed on the 21st February.

* The eastern gateway, although in some respects less perfect than the northern, appeared to me to be the best to cast. The northern gate has a greater number of detached figures and animals on its superstructure, but the carvings on the piers are less sharp than the corresponding ones on the eastern gate. Again, the northern gate has a "lean forward," and is about one foot out of the perpendicular at the top; and as I was unprovided with strong chains to support the stone-work, it was more prudent to avoid risking any accidents by selecting to cast the more secure of the two gates.

The pieces composing the "parent" cast now have to be carefully packed for removal to England, and on arrival will be fitted together, previous to any steps for reproducing the requisite number of copies of the gateway. When the first perfect

set of pieces have been reproduced, they will be built up to represent the original gateway to serve as a type for other copies, and I propose to have large-sized photographs taken of each piece of the cast to accompany the detail drawings of the other carved gateways round the Sanchi Tōpe.

The chief difficulty throughout the work was to make all the gelatine moulds before the weather became too hot. A dry atmosphere is more favourable than a damp one, and therefore a great difference in the dry and wet bulb thermometer readings renders a high temperature less powerful to affect the gelatine; but it may be roughly stated that without 12 hours with the thermometer below 80° the gelatine fails to obtain that elastic consistency which is so essential to the production of a good mould.

In order, therefore, to run a successful race with the daily increasing heat, it was necessary for each modeller to work his hardest; and I have pleasure in the special favourable mention of Sergeant Bullen, Corporals Jackson and Heath, &c., who throughout the work displayed untiring energy; also, in stating that the under-mentioned native modellers worked well—S. Barnald and Pūnewamy, from the Madras School of Industrial Art; Nobin Chander Mukerji, Bonomali Pal, Khudiram Das, from the Calcutta School of Art; and Güler, modeller from Agra.

7. During the casting operations Thakōr Dass and Habibulla, the draughtsmen who accompanied me to Kashmir and Muttra, were employed in making detail drawings of the ruined northern and western gateways of the Tōpe. I propose to obtain permission to have these drawings published at the India Office to form Volume 3 of the Archaeological Series. [These were used by Mr. Ferguson in his "Tree and Serpent Worship."—H. H. C.] The casting operations excited a great deal of interest among the natives round Bhopal and Bilhar, and every day I received visits from large parties of natives requesting permission to look at the finished casts, which were drying in tents.

8. The expediency of restoring ruined buildings and keeping them in repair has engaged the attention of Government at various times.

In the majority of cases it would, perhaps, be more suitable to attend to maintenance rather than to undertake complete restoration. At first I was of opinion that the fallen gates of the Sanchi Tōpe could be restored (i.e. during the casting operations, but I had neither time nor funds—H. H. C.), but on more careful investigation I not only find that such a restoration would be very expensive on account of the great masses of stone composing the gate, but also extremely difficult, as in both gateways the piers, which would have to support the whole superstructure, were found on excavation to be split down their entire lengths and otherwise broken. The most to be done at Sanchi without going to great expense would be to conserve the carvings intact, and to prevent mischievous chipping off of heads of stone figures and animals. Steps should also, I think, be taken by the Begum to prevent the two standing gateways from falling, and to do anything reasonable that may tend to the conservation of the wonderful remains on the Sanchi hill.

In regard to the preservation or restoration of the buildings around Muttra, the Hindu temple at Bindrabau, known as Mandir Gobind Dōoji, would require a complete restoration of the superstructure. Such a work from its size would entail very great expense. [This has since been restored by Mr. Heath.—

Restoration and conservation of buildings in the Muttra neighbourhood.

H. H. C.] An amalgamated list of architectural structures in the North-Western Provinces was prepared from lists furnished by Commissioners of Divisions in 1868, and this temple was thus noticed:—

"This falling into great disrepair, and the Mahant Goshains are not inclined to repair it. They are little for the sake of the building as long as their fees come in regularly. Suggests that the Raja of Jaipur, who is a descendant, be requested to grant funds for its repair, or repair it himself."

His Honour the Lieutenant-Governor of the North-Western Provinces remarks marginally that "Government ought to keep this in repair."

I was informed at Bindrahan that a drawing of the original form of the temple might be found on the walls of the Fort at Jaipur [I have had a tracing made of the fresco which is in the Amber Palace, Jaipur.—H. H. C.]: here, a roof like the original can be restored. The interior of the temple requires a great deal of petty repair, and I think that the Mahant Goshains should be urged to preserve it.

The temple at Govardhan, called Mandir Hardeoji, also requires much repair; the roof is very unsafe, and the superstructure of the sanctuary was destroyed by Aurungzeb. A note in the Amalgamated List of Buildings in the North-Western Provinces states—"About twenty years ago Rajah Bulwant Singh of Bhurtpur had it repaired, and the present Rajah, Jiswant Singh, intends doing so now."

The Palaces at Dig are in very excellent repair, and are frequently inhabited by the Raja of Bhurtpur and English visitors.

At Fatehpur-Sikri it appears that a portion of the Durgah Fund is at the disposal of the Collector of Agra, and that urgent repairs are executed in buildings that are occupied.

Akbar's office is in use as a dak bungalow, and the Birini Palace and the house of Miriam, one of Akbar's wives, are occasionally occupied by Europeans. [I hope that a proper dak bungalow will be built and so release these buildings, the repairs of which are now sanctioned.—H. H. C.]

Shahih Salim Chisti's tomb is in good preservation, and the only buildings that appeared (during my stay at Fatehpur Sikri) to require conservation were the apartments used by the Sultana and the Khaw Mohal.

The eaves of the roofs in both should be renewed to protect the stone-work from the rain, as well as to take away the air of neglect that hangs over these buildings.

The ancient temples in Kashmir are mostly in a ruinous condition. The

Conservation of Kashmir temples.

Maharaja should, however, do something to preserve these interesting ruins. The enclosure and temple of Martand should be kept free from jungle, and it would be no great expense to cover the now open roof of the temple with a thatch so as to preserve what is left of the interior carvings.

The tank round the temple at Pandrethan should be cleared of reeds, and the stone roof repaired in order to preserve the beautiful carved stone ceiling in the interior.

The enclosure and the temple at Bhandiur appear to receive some care, and, being the most perfect of their kind in Kashmir, should not be allowed to fall into a worse condition than the present. At Avantipur it would be useless to attempt any repair or restoration. At the other temples at Payach, Pathan Wangat and Srinagar, the jungle should be prevented from choking up the ruins and cleared, so as to allow of close inspection.

G

Note on the Industrial Arts in India, dated May 1879.

1. Although influences have been long active tending to deteriorate the original character of Indian ornament, no great attention has been drawn to the subject until within the last few years.

2. Changes have been wrought so gradually that they have received little notice from those whose daily occupations have been to minister to the more urgent and practical wants of this country. It is only by comparing the manufactures of 30 or 40 years ago with those of to-day that a full estimate can be formed of the harm that has been done.

3. Owen Jones, Sir Digby Wyatt, Redgrave, Lubke, Langlois, Dr. Royle, Taylor, Forbes Watson, and Birdwood have at various times drawn attention to the peculiar merits of indigenous Indian ornament as applied to works of utility; but the *first* concentrated effort to bring together the facts of the subject as at present known was made when, in 1874, the task of compiling a descriptive catalogue of the Indian objects exhibited in the South Kensington Museum fell upon myself.

4. The opportunity I then had of examining both the collections there and at the Indian Museum served to strengthen and stimulate the interest I have always taken in the general subject of Indian architecture and art.

5. As Archaeological Surveyor in the North-Western Provinces from 1865 to 1870, my observations were mostly directed to old temples and buildings in Kashmir, at Agra, Delhi, and at Sanchi in Central India; but architecture is the parent of industrial ornament, and the latter is often to be valued not alone for its intrinsic beauty, but for the interest it possesses in a recognisable architectural origin.

6. The collections of Indian art at the Indian Museum and at South Kensington are the results of various Exhibitions held in London and abroad. Many of the best specimens of modern art industries that have been collected in this country for the international gatherings of 1851, 1855, 1862, 1867, 1870-74 and 1878, have eventually been secured for one or other of those institutions.

7. From these it is curious to trace that gradual introduction of European forms of ornament which have not ceased to import a debasing and impure character to the ornament and colouring employed in the industrial arts. This degradation has of late, and specially since the last Exhibition at Paris, excited much comment; but if the corruption of Indian art by the uncontrolled mixture of styles meets with no approval in Europe, how much more should dissatisfaction and disapproval be felt among those who are in the country, and in whose hands lies the power of rendering help?

If the debasement appears in the collections at home, it certainly is much more apparent in the objects daily produced and sold to us in this country:

8. I know of no example so deplorable as the present condition of Alichah pottery. In former days this industry was noted for graceful well-modelled shapes. To-day it is detestable for its worthless imitation of English jugs covered with vine leaves. I quote this case of Alichah pottery, as collections are displayed for sale at the railway station at Alichah, and always excite in me feelings of regret at what I consider to be an industry completely ruined.

9. There are, however, many examples of handicraft more or less debased by our Western tastes and styles—some so much as to damage the demand for them.

It is often difficult to tell pieces of Delhi from vulgar Birmingham jewellery. The koft metal work of Gujrat and Sialkot loses its flavour in the application

to inlaid, picture frames and small objects, instead of to shields and arms. Carpets are now often woven on designs furnished by tasteless English dealers; embroideries are applied to English instead of Indian fabrics; and the patterns in Kashmir shawls are no longer the so splendid specimens of pure Indian colouring and outline that has made them famous in years gone by.

10. The importance of helping Indian industries to recover their old characteristics should, I think, be considered in connection not only with the value from an educational point of view, but with the view to a direct benefit which may arise to the craftsmen themselves, and ultimately to Government.

11. The love of decorative art is very much on the increase in Europe, and is diffusing itself all over England. People formerly content to accept anything from India as a mere "curiosity," are now more discriminating as to purity of style. They know something of Hindu forms and mythology, and of the exigencies of the Mussalman creed forbidding the imitation of human or animal shapes. A demand may not instantly result from such growing knowledge, but in tracing the possible future of Indian arts the tastes and knowledge of patrons and buyers are worthy of consideration.

12. Museums and Art schools have been established in this country, but not with any very precise aims as regards Native art. [The schools want ample means and special opportunities for studying Indian arts.—H. H. C., 18-7-82.] To render them of use they should be accessible and attractive to Natives, and well stored with objects of the best indigenous art.

13. Instruction in European styles confuses the Native student, and nullifies him for the development and advancement of his own craft. With the best wish to adopt our forms, he fails, for want of sympathy and understanding. He reverts, however, with readiness to his own traditional ornament.

14. To bring this back to him requires ample illustrative material, in the collection of which lies the mainspring of the power of Government to render assistance. Give a clever workman a good Native pattern, and he works willingly and with success; but he is incapable of correctly interpreting European forms.

15. The varieties of ornamental manufactures in India are numerous; some alive, some dying, some dead, and some perverted. To revive and preserve can, I think, be best accomplished by taking stock of the best ancient and modern work and making it easy of reference to Natives.

16. I believe that a series of illustrations collected from the best types would not be very difficult or costly to produce. The sources from which they could be obtained are—

- (a) architectural flat and carved ornament;
- (b) ancient works of industrial art; and
- (c) from existing illustrations of varieties of Indian art in English and foreign books on the subject.

17. The drawing published in single plates could be purchased by Natives, or in some cases distributed free of cost; schools of art and museums should have on view and for sale a complete set.

18. I believe that a simple process of giving illustrations will accomplish much good, and after it proves itself to be successful the scope of museums and schools of art may be extended.

19. As an example of where good patterns seem to be wanted, I may mention the case of pottery made at Multan. Two Natives know the secret of making the two shades of blue, by means of which they produce beautiful effects in the limited sphere of their traditional foliation. They apply this with great success to plates, tiles for mosques, vases, &c., but they have not access to the thousand varieties of ornamental outline existing in the enrichments of old Hindu and

Muliammalan buildings. They also want more knowledge of the old pottery shapes which India can supply from its three corners. Encouragement would extend this industry, which does not confine itself to Multan, but is still alive in Sind.

20. There exist throughout India many thousand craftsmen able to produce admirable saleable works in textiles, pottery, metal, wood and stone; and I cannot but think that it would be more profitable to encourage these people in industrial pursuits rather than they should be left to labour in the fields.

21. To keep up the interest among workpeople who still produce good manufactures, the establishment throughout India of an industrial order of merit, say a medal or certificate, would be of great good. It would be necessary to show care in the award of such recognitions; but there are many civil and military officers possessed of good taste from whom local judging committees could be formed. The labour to them would alone be a relief in the dull monotony of official work, and would excite an interest, not only in India, but amongst their friends in England.

22. To collect the necessary materials for producing illustrations of the best known ancient and modern art industries will require the co-operation of Local Governments and Administrations; but with such assistance, and with a small grant from imperial funds, a staff of clever Native craftsmen may be organised to carry out the work.*

H

Report from Captain H. H. Cole, R.E., on Special Duty, to the Secretary to the Government of India, Public Works Department, dated Simla, 10th May 1880.

I have the honour to acknowledge your letter No. 126B., dated the 20th ultimo, requesting me to submit a report on the subject of a definite scheme for carrying out the conservation of monuments of artistic and historical interest.

2. In the memorandum which I beg leave to annex to this report I have pointed out that, for special repairs, preservation and illustrations, it will probably be necessary to create Divisions similar to that in the North-Western Provinces for—

- (1) Bengal.
- (2) The Punjab.
- (3) The Central Provinces, Rajputana, and Central India.
- (4) Bombay and Hyderabad.
- (5) Madras and Mysore.

It may be found on investigation that some Divisions should not be limited to a Presidency or Province. For instance, it may be held convenient that Gwalior should be placed under the Archaeological Division in the North-Western Provinces.

I have recently inspected the architectural and historical monuments to be found in and around Lahore and Delhi, and hold the strong opinion that, if the

* I have drawn up a list of some Indian industries of which I know something.

buildings at these much-visited and populous places be rescued from the adverse circumstances and neglect which prevail to such a large extent, very valuable and creditable work will be the result.

Besides Lahore and Delhi, there are many other places in the Punjab having interesting and valuable monuments, most of which are mentioned in the official list published in 1875; but I would suggest that Major-General Cunningham, R.E., should be asked to furnish the names of any objects of archaeological interest in the Province which he considers call for special care or preservation.

There is enough work at Lahore and Delhi alone to justify the establishment of a separate Architectural Division for the Punjab. Valuable outlying monuments can be taken up gradually as funds are provided; but I feel that it is necessary to begin at the important centres, being convinced from what I have lately seen that architectural monuments have suffered, and are suffering, more from the acts for which Government is responsible than from the natural decay and ruin produced by ruin or vegetation in the jungle and deserted places.

I hope during the present year to be able to investigate some of the most remarkable buildings in Bengal, the Central Provinces, Rajputana, and Central India, as well as in the Bombay and Madras Presidencies, with the view of submitting definite proposals.

The Agent to the Governor General in Central India has recently recommended that the vegetation round the famous Buddhist Tope at Sanchi be cleared and the fallen gateways re-erected, and Mr. Bernard has invited my opinion. I not only think Major Pridmore's* proposal to clear away the jungle an exceedingly good one, but hold that the setting up of the fallen gates is one of the first and most important works in a scheme of conservation of valuable antiquities and works of art in India. When engaged in making a cast of the eastern gateway in 1870, I had careful drawings made of the fragments of the fallen south and western gateways; also of the small gateway near the large tope; and these have been published in Mr. Fergusson's book on Tree and Serpent Worship. (See page 141, plates VII and VIII; page 116, plate XV; and page 119, plates XVIII, XIX, and XXI.)

From these restoral drawings (most of the pieces of stone carvings are on the ground) it will be seen that some of the stone-work is missing, and would have to be supplied in plain blocks in order that the structures may be built up securely.

I am at present able to speak particularly only of Lahore and Delhi, and of what Mr. Heath (the Executive Engineer of the Archaeological Division in the North-Western Provinces) has done at Agra and the neighbourhood.

Of the latter work I submit a separate report. The results are satisfactory in the highest degree, and must be most gratifying to their author, Sir John Strachey. *The work instigated by him in the North-Western Provinces shows convincingly how barbarous it is to withhold similar measures for preservation from other parts of India.*

3. Without entering into a lengthy description of buildings which are well known and have often been described by Major-General Cunningham, R.E., Mr. Fergusson and others, I merely here note the condition in which I found some of them during my late visit, and state what I think necessary to prevent further decay or maltreatment, and what in certain cases should be done towards complete renovation or restoration.

* Political Agent at Bhagal.

4. **Buildings at Lahore.**—The first building that I visited at Lahore is an old gateway, called the "*Chakurji*," which is 1½ miles off on the Multan road. It was the principal entrance to a garden, which no longer exists, and which was built by Zohra Nishan, daughter of Alamgir, in 1641 A.D.

Chakurji.

This gateway is square in plan, and had four minarets, three of which remain. The material is brick, laid in lime mortar and faced with beautiful coloured tiles, cut in ornamental shapes and fitted, one to the other, like mosaic work.

The colours are unusually numerous—yellow, green, brick-red, dark-blue, light-blue, gold colour, orange—arranged in foliated patterns in spandrels, panels, soffits, and borders.

One corner of the gateway has completely fallen. Plans and elevations will be made, to show exactly what the present condition is. The tile-work is so beautiful, that I think the progress of decay and ruin should be stopped by securing the existing veneer and by propping up and strengthening the weak portions of the masonry. The fallen debris should be cleared away, and the place cleaned up and surrounded by a stone railing. The cost of these measures will be estimated when the plans are completed.

The Shahlimar Gardens.—The Shahlimar Gardens, about 4 miles from Lahore on the Amritsar road, were laid out in 1637 A.D. by order of the Emperor Shahjahan.

Shahlimar Gardens.

They are extensive and surrounded by a fine wall and masonry gateways. The gardens, although sometimes called the "*Versailles of the Punjab*," are indifferently kept up, and the canals of water and fountains require cleaning out and repairing. The baradaris and kiosques in the centre were looted by Ranjit Singh of their marbles, and have been badly restored; and the brick-work laid on edge in fanciful patterns on the terraces and walks should be put in good order. At one corner of the enclosure is a *hammam*—at present dirty and neglected; but there are some finely painted wooden doorways between the various bath-rooms, which should be taken care of and protected by a hard colourless varnish, such as is used to preserve old oil-paintings.

Painted wooden decorations of Shah Jahan's time are not very common, as so much has been destroyed in his buildings. It is therefore all the more satisfactory to come across specimens which are not past preservation. The central baradari has coloured walls of arabesques painted in fresco, and some richly painted wooden ceilings. To prevent damage, measures should be taken by some one specially engaged for his acquaintance with processes for reviving and preserving old painted work. Plans are in course of preparation of this garden and its buildings which will permit of an estimate being framed for keeping up the place and what remains of its decorative works.

Golabi Bagh.—On the road to the Shahlimar Gardens and about half-way is a gateway which formed the entrance to the *Golabi Bagh*. The garden has disappeared, but this

Golabi Bagh.

building, at present occupied by the police, is a fine specimen of coloured tile-work (or "*zaski*," as it is called), and is worth preserving from the ruin which is rapidly overtaking it. Drawings are in course of preparation showing its existing state, and from which the estimate for preserving the building can be framed. It will, in my opinion, be merely necessary to secure the present veneer of tile-work, and to strengthen the existing masonry and make the roof proof against rain. The building should be cleared and fenced round with a good stone railing.

Begumpura.—Beyond the *Golabi Bagh* and off the road to the left in the Shahlimar direction is a small building at a place called Begumpura, where the tile-work is very

Building at Begumpura.

fine, and worthy of the same kind of protection recommended for the *Golabi Bagh* gate. Drawings will be made.

Shahdara.—Shahdara is on the north bank of the Ravi, and about 2 miles from Lahore by the State Railway. Here are—

Tomb of Jahangir at Shahdara.

(1) the tomb of Jahangir, with enclosure and garden;

(2) a sarai;

(3) the tomb and enclosure of Asuf Khan and that of Nur Jahan.

The whole place, excepting the actual tomb of Jahangir, is utterly neglected and uncared for. Bahadur Shah, Ahmad Shah and Ranjit Singh carried off many of the marbles, and the occupation by the British troops after the Sikh war caused great damage. There exists, however, an evil which has caused, and is still causing, increasing and cruel destruction. Between the tombs of Jahangir and Asuf Khan is the sarai, which has been converted into an engine-yard and manufacturing depot of the State Railway. Holes have been knocked in the walls, the grounds broken up, and the various gateways occupied by the railway employes and their families! As I have said, the mausoleum of Jahangir is the only building at all cared for. It is in the centre of a large square-walled enclosure, and was built by Nur Jahan in 1628 A.D. It now consists of a raised terrace with lofty minarets at the four corners. Below the terrace is an open colonnade, which surrounds the tomb of the Emperor. The inlaid marble-work and painted decorations are very beautiful and well worth protection and renovation.

Before Ranjit Singh's time there existed a marble pavilion on the terrace, but the materials were removed by him to build the baradari in the Humayun Bagh in Lahore. My own impression from the style of this baradari is that it was removed bodily from Shahdara. If this is ascertained on careful investigation to be the case (and tolerably trustworthy evidence could be obtained by measurements and inquiry), I think the building ought to be restored to its former position. Along the walls of the open colonnade round the tomb is a Dado of beautiful tile-work, now invisible on account of coats of whitewash: this whitewash should be carefully removed.

Plans of the Shahdara enclosures and tomb are in course of preparation. The garden round Jahangir's tomb is a mere waste, and part of it is let out for ordinary cultivation. Some of the gateways have fallen to ruin, and should be, as far as possible, repaired.

As an essential part of the whole conception, I am strongly of opinion that the grounds should be put in thorough good order without any expensive horticulture, and that the encroachments made by the Ravi at the south corner should be restrained by strong walls and breakwaters.

It is difficult to roughly guess at the probable cost of putting the grounds and buildings in repair; but I hear that orders have issued for the railway to move their shops and to leave the place, so that the cost of this would not be debitable to the work of conservation.

Badshahi Masjid.—The *Jama Masjid*, or Badshahi Masjid, near the fort, was built by Aurangzib in 1674 A. D., and is in a fair state, having, through the exertion of Major Parry Nisbet, when Deputy Commissioner of Lahore, been repainted inside and generally repaired. The funds were subscribed by the Muhammadans of the city. Repairs to the colonnade of the building require to be completed. In front of this

masjid is the Huzuri Bagh, in the centre of which stands a marble pavilion with some beautifully painted ceilings, composed, if not wholly, of part of the materials of the cupola which formerly surmounted Jahangir's tomb at Shahdara. As I have already stated, I think the cupola should, if possible, be restored to its original position.

The Roshnai Gate.—The *Roshnai Gateway*, near the Huzuri Bagh, has been badly restored, and is an example of the damage done when work of this kind is left to unqualified

Roshnai Gateway.

and unsympathetic hands.

Ranjit Sing's Tomb.—Is in fair preservation, but it has some fine doorways of carved wood, which require cleaning and preserving. Sir Donald Macleod had the interior

Ranjit Sing's Tomb.

columns strengthened with iron clamps.

These buildings (i.e., the *Jama Masjid*, the *Roshnai Gateway*, and *Ranjit Sing's Tomb*), call for no special treatment, but should be in charge of the Executive Engineer of the Punjab Architectural Division.

Wazir Khan's Mosque.—The *Mosque of Wazir Khan*, built in 1635 A.D. in the centre of the city, is a magnificent specimen of tile decoration. It is itself a perfect grammar of

Wazir Khan's Mosque.

coloured ornament, and is one of the most valuable architectural monuments in Lahore. It furnishes nearly as much subject and matter for the student of decorative art as the Alhambra itself, and a volume rivaling Owen Jones' work could be produced. As I have elsewhere stated, the illustration of architectural matter, such as this building possesses profusely, will do more to revive and encourage the ceramic art of India than anything I know of. The mosque and its enclosing walls and buildings are built of brick, veneered over with tiles cut and laid like mosaic work. Being in the heart of the dusty city, it is sadly in want of cleaning and repair. Plans and drawings are being made, but any necessary funds laid out in prolonging the existence of this beautiful building would be well worth spending.

I also strongly recommend the sanction of Rs. 5,000 for the production of a set of detailed illustrations of coloured tile-work in Indian buildings based on this mosque and for repeating 250 sets by chromo-lithography.

Lahore Fort.—There is a great deal of interesting architecture to be seen in the fort, if one could only get at it. On entering the outer gate, the wall of the fort and palace

Palace buildings in the Lahore Fort.

is to be seen covered with designs in faïence enamelled tiles peculiar for the representation of human figures, animals, and signs of the zodiac. The whole of this should be preserved and made as secure as possible against rain. On the 10th of April, when I first went to examine the buildings, I found myself stopped at the entrance to the *Shikh Mahal* and *Sowani Bary* by a sentry, because some prisoners from Kabul were confined in these buildings. The fine old pillared *Divan-i-Ain* and throne-room is in use as a common barrack room filled with men's beds and kit, and the rooms at the back of the throne used for dining in. The walls and ceilings of the latter were once finely painted, and these, together with the marble throne and cupola, are not likely under present circumstances to meet with very tender treatment. The building is also much spoilt by being enclosed all round, instead of being, as originally and like all buildings of its class, an open pavilion.

Khwabgah.—The *Khwabgah* of Shah Jahan, of marble and lattice-work, is in use as a garrison chapel—from its traditions about as unsuitable a place for Christian worship as could be selected. The building is enclosed on all sides by ugly wadded pardahs, and a new and utterly unsuitable modern timber roof has

been added. The font is at a place which Shah Jahan would most likely have selected for his couch to catch the air through the marble lattice.

Moti Masjid.—The *Moti Masjid of the Palace*, a small and beautiful building of white marble, is now blocked up, and otherwise adapted to the purpose of a treasury. It was therefore quite impossible to examine the building closely. The *Khanau* between this and the *Diwan-i-Am* is used as a hospital.

The remains of some of *Jahangir's* buildings are used as the Sergeant-Major's quarters. And some domed buildings belonging to the palace with painted ceilings (one of which a year ago barely escaped the departmental whitewash brush) are in use as officers' quarters. The only buildings not in present use are the *Armoury*, which is a sort of museum of old weapons, the *Shish Mahal* and the *Naulaka*, a mosaic marble pavilion of Aurangzeb, much out of repair. The latter should be restored and thoroughly renovated.

The Shish Mahal.—The painted ceilings and walls of this building were renovated at the time of the Prince's visit, but it is not difficult to see the difference between the new and old work.

Careful plans and drawings of all the buildings in the fort are being made, and will be submitted, for prolonging their existence as works of art and for terminating their incongruous relations with the military authorities. I would recommend that all the buildings of interest be, as far as possible, restored and fenced in, so as to keep them separate from the barrack buildings, and that they be kept up solely as show places and as the only means of perpetuating some of the most beautiful and interesting specimens of Lahore Imperial Mogul art. When it is considered what an outcry would be made at a proposal to convert *St. James' Palace* into an underground railway station, or *Hampton Court* into a barrack, I think that there exist fair grounds at Lahore for putting an end to the present discreditable state of things at the *Fort* and *Shahdara*, and for some such measures as I here put forward in regard to other valuable buildings.

Buildings at Delhi.
The Fort and Palace buildings.

The Fort and Palace buildings at Delhi.—
As in the case of the Fort buildings at Lahore, those at Delhi are almost all in military occupation.

The Diwan-i-Am.—The great pillared *Diwan-i-Am*, with its fine marble mosaic canopy and throne, is used as a canteen, and on the right of the throne is a bar for serving out liquor! To the left of the throne is an enclosure of bamboo-screen-work in which Nubbi Bax keeps a soldiers' coffee-shop! Above and at the back of the throne is a small open apartment, the walls of which are faced with the celebrated black marble mosaic work; but this work, as well as the inlaid patterns on the throne, have been villainously repaired in coloured plaster, and the arrangement of the panels is not as formerly. Some of these panels were removed by Sir John Jones at the time of the Mutiny, and are at the India Office Museum in London. They might be brought to this country and placed in their original position. The door at the back of this room has been ingeniously filled up with iron bars, through which the interesting process of soda-water manufacture can be watched and heard. The whole building should be cleared, kept clean and repaired.

The Diwan-i-Khas.—This beautiful pavilion is not in military occupation, but it has been disgracefully treated. To prepare for a ball given in honour of the Prince of Wales, the moulded fretwork of the wooden ceiling in the centre of the building was repainted in black, red and gold instead of white and gold, the original colours, and the central rose was converted into a sort of starved star-fish! The effect, it is needless to say, is harsh and glaring. Fortunately the outer colonnade has the design of its ceiling intact, and from it the original colours and pattern can be restored in the ceiling of the centre hall. There is a great deal of

beautiful painted work to restore at Delhi, and it will be necessary to engage a properly qualified restorer of paintings to do the work. The roof of the *Diwan-i-Khas* is in an unsafe condition, and the proposal to renew it with iron beams seems to me to be right, provided the old ceiling below is left undisturbed; and this can only be done by leaving the present wooden beams to which the old ceiling is secured, and by inserting the iron joists from the top of the roof.

The painted work in the ceiling of the outer colonnade should be simply repaired and left as nearly as possible as it is now in tone and pattern, but rendered durable by means of transparent varnishes or other remedies familiar to the expert in painting restoration.

In order to examine the beams of the roof, the ceiling was pulled down in several places (instead of opening up the roof from above); and in replacing the moulded fret pattern, small half-moulded sticks were screwed up, and the screw-heads may be still seen!

The decorations of this building are perhaps the finest of any done under Shah Jahan, and, if I may express the opinion, no expense or care should be spared to prolong their existence. The marble floor of the building seems in fair order; the Dado of mosaic wants repair, many stones having been picked out and the holes in some places filled with coloured plaster. The beautiful, gilded arabesques on the upper part of the marble pillars should be carefully restored where the weather has washed off the pattern, and the roof must be made perfectly water-tight.

Khwabgah, Baitak, and Saman Burj.—The marble buildings on the right of the *Diwan-i-Khas* comprise the *Khwabgah*, *Baitak*, and *Saman Burj*, and are filled with beautiful marble traceries and painted ceilings and walls; but in the outer verandah some of the decoration has become weather-beaten. The marble mosaic Dado round the rooms is a good deal damaged and requires repairs. The painted ceiling in the small kiosque which projects towards the river is damaged, and the railing which formerly went round the front is wanting.

The two small rooms towards the *Diwan-i-Khas* have been plastered and whitewashed, thus hiding a painted and gilt wall. The red sandstone columns between them were chunamed over in 1876.

The Hammam.—The *Hammam* buildings on the left of the *Diwan-i-Khas* have had all their painted ceilings whitewashed over. The floors and baths are inlaid with stones, and require much repair and renovation.

As in the case of the buildings on the right of the *Diwan-i-Khas*, the sandstone columns which face that building are plastered over.

The Moti Masjid.—The *Moti Masjid*, close to the *Diwan-i-Khas*, is in fair condition, but petty repairs are necessary to put the marble floor and inlaid work in order.

The Haiyat Baksh.—When laid out by Shah Jahan the fort buildings were all connected by covered colonnades, and there were several gardens, one of which, the *Haiyat Baksh*, has disappeared; but the bath in the centre and two marble pavilions still remain. These latter have had their marble mosaic Dadoes whitewashed; one building is used for serving out meat rations, and the other as a gymnasium!

The Rang Mahal.—The *Rang Mahal*, or painted palace, is now whitewashed, re-roofed, and partitioned off to suit the requirements of a mess-house!

Many other buildings in the fort are put to improper use; and I think there can be no two opinions on the necessity for keeping all the interesting and

decorative parts of Shah Jahan's palace as much as possible as they were, and only for the gratification and edification of European and Native visitors.

It would be easy to fence them all in one enclosure; and after they are repaired and renovated, and the troops are accommodated in other and more suitable buildings, the whole should be handed over to the custody of the local civil authorities to keep clean and properly cared for.

Plans are being made and estimates are in course of preparation for doing all that is necessary, without including the cost of erecting suitable buildings for military purposes elsewhere in the fort.

Jama Masjid.

The Jama Masjid.—The *Jama Masjid* is kept repaired by Muhammadans and by occasional gifts. It is in very good order, but wants to be kept cleaner.

The "Mimbar," or pulpit, of white marble, wants repairing.

Zinath-ul-Masjid.—The *Zinath-ul-Masjid* is a fine mosque, built in 1710 A.D. by Zinath-ul-Nisa, daughter of Aurangzeb.

Zinath-ul-Masjid.

It was used a few years ago as a Commissariat bakery; but this has been removed. Whitewash was liberally applied when artillerymen were quartered in the building during the mutiny, and the whole place is now thoroughly neglected; the roof leaks, and the red sandstone beams below are decaying in consequence. The building is in Delhi, in what is called Darya-gunge, and should be put in good order. Plans are preparing for an estimate.

Buildings at the Kutub.—The *Kutub Minar* is in good order generally, but

Buildings at the Kutub.

One photograph in Book on Archaeological Survey of Ancient Delhi, published by the Archaeological Society in 1872.)

some of the carved stone-work in the lower band is falling away through crushing. This should be made secure, and the carved work, which has become discoloured by weather, should, if possible,

be cleaned.

The whole of the ruins about the Minar, such as the *Masjid-i-Kutub-ul-Islam*, *Kutub-ul-din's arches*, *Shams-ud-din's arches* and *Ala-ud-din's gate*, *Shams-ud-din's tomb*, &c., should be cleared of fallen stone, the carved portions collected and, if possible, replaced from where they fell; other debris of no interest should be removed. Columns and walls should be rendered secure, and roofs made water-tight. The whole area should be enclosed with a substantial stone railing to keep away cattle, which now defile the place; and the grounds should be kept up, and good paths made to all the interesting monuments in the vicinity. A plan is in course of being made which will show what I propose, and from which an estimate can be framed.

Imam Zamin.—The tomb of *Imam Zamin*, which is surrounded with red sandstone screenwork, is much covered with whitewash, which is a great disfigurement.

Imam Zamin.

Jamali Kamali.—The tomb of *Maulvi Jamali Kamali*, 1535 A.D., near the Metcalfe House at the *Kutub*, is the remains of a most beautiful building; it stands in an enclosure now overgrown with jungle. The floor of the building is of white marble,

Jamali Kamali.

and round the walls is a Dado of partly whitewashed tiles. The upper walls are beautifully inlaid with colored tile-work, and the ceiling is ornamented with incised and coloured plaster arabesques. The exterior is in great disrepair, and many of the coloured tiles which once adorned it have been removed. The whole place should be cleaned up, and the tomb put in a good state of repair. It is not possible to restore and renovate the tile-work, but a good deal can be done to preserve the building.

Masjid of Fazelullah.—The *Masjid of Fazelullah*, 1525 A.D., near *Jama'ath Khana*, is a massive stone building of considerable beauty. The enclosure is overgrown with

Masjid of Fazelullah. jungle, and the mosque itself is filthy and used by cattle. The place should be cleared and put in a state of complete cleanliness and repair. A plan and estimate are being made.

Adam Khan's Tomb.—*Adam Khan's Tomb*, near Mahrauli, date 1572 A.D.,

Adam Khan's Tomb. calls for no special treatment, but the roof is threatened with vegetation and should be repaired and made secure; the ground about the tomb should also be cleared of debris.

Humayun's Tomb.—*Humayun's Tomb*, 1565 A.D. The tomb itself is in a

Humayun's Tomb. fair state of repair, but the terrace on which it stands has lost more than half its stone railing, and the arches supporting the terrace stand in need of repair; much of the marble inlay is defaced.

The enclosure in which the tomb stands was formerly a beautiful garden, with terraced walks and entrance buildings at the centre of each wall. Now the ground has lost all the character of a garden, and is let out in patches to cultivators [these were, until quite recently, the descendants of the Kings of Delhi U.—H. H. C., 29-8-52] who grow cabbages and tobacco. The gateways are all in a state of great disrepair, and should at all events be cleaned and made secure against weather. A small tomb in the garden, with considerable pretensions to beauty, is in use as a cattle shed, and is much in need of repair.

I think the system of letting out the gardens of tombs to cultivators a very unworthy means of adding to municipal funds. A plan and drawings are making of *Humayun's Tomb* and enclosure, for putting the buildings and garden in good order.

Near *Humayun's Tomb* is a collection of buildings, all of which, on account of their interest and beauty, should be in the charge of the Executive Engineer of the Punjab Architectural Division.

Chausath Khamba.—The *Chausath Khamba*, date 1600 A.D., is a marble

Chausath Khamba. pavilion of 64 pillars, with beautiful marble screen-work enclosing it. The building is in fair order, but some of the perforated screens which had in parts disappeared have been renewed in stone.

Nizam-ud-din's Tomb.—*Nizam-ud-din's Tomb*, date 1324 A.D., has been

Nizam-ud-din's Tomb. repaired and added to in Akbar's and Shah Jahan's time. There is a good deal of marble screen-work and painted decoration. Over the tomb is a wooden canopy inlaid with mother-of-pearl. The tomb is looked after by Natives, but they damage it with whitewash, which should be removed so as to show the original work.

Khusru's Tomb.—The *Post Khans' Tomb*, date 1350 A.D., is a marble build-

Khusru's Tomb. ing, also liberally treated by the Natives, who look after it with whitewash. It is also very dirty and requires repair.

Jama'ath Khana Masjid.—The *Jama'ath Khana Masjid*, date 1353 A.D.,

Jama'ath Khana Masjid. built by Feroz Shah, is a fine building, of red sandstone, with incised ornament on the façade, like the arches of Kutub-ud-din at the *Kutab*. Whitewash has been used freely by the Natives and should be removed. The building requires much repair. The interior domes have painted ceilings of great beauty and plaster incised work.

Kalan Masjid.—The *Kalan Masjid*, built by Feroz Shah, 1351-1355 A.D., is in Delhi. The inscription over the entrance doorway was formerly inlaid and requires renewal.

The interior of the building wants cleaning up and petty repair, and the plaster of the domes wants repairing badly.

Repairs to the above buildings should, I think, be defrayed out of a special grant for petty repairs.

Fatehpuri Masjid.—The *Fatehpuri Masjid*, date 1640 A.D. The stone-work of the interior has been coated with whitewash and the carved Dado with red paint. The stone slabs

of the roof threatened some years ago to give way, and two rows of pillars with arches were built up in the centre, forming an intermediate series of pillars; but these are not of the same pattern as the old ones and should be removed, the roof being strengthened with iron joists. A plan will be prepared for this.

Safdar Jung's Tomb.—*Safdar Jung's Tomb*, date 1753, stands in a large enclosure, with gateways on all four sides. The tomb itself is in fair order, but requires some slight repairs. The garden is in a bad condition,

and, like that of *Humayun's Tomb*, is let out to cultivators. It should be put in good order; the entrance buildings want much repair. The principal entrance has a finely painted ceiling in a small apartment facing the tomb. Plans will be prepared for necessary repairs.

Kila Kona Masjid.—The *Kila Kona Masjid*, date 1540 A.D., is a beautiful building in *Parana Kila*, and requires considerable repair. Plans will be prepared.

The old buildings at *Tughlakabad* at *Parana Kila*, *Ferozabad*, *Sultan Gori*, &c., should be cleared of debris, but further investigation than I have yet been able to make will be necessary.

(See Photographs Nos. 17, 18, 19, 20.)

I recommend strongly that a sum of Rs. 5,000 be sanctioned for the preparation of detail drawings of carved wood and stone ornament and of painted decorations, in which the *Delhi buildings* abound. The plates should be published for general sale and circulation, in order to stimulate Indian industrial art and for use in schools of art throughout the country.

In order to inaugurate the conservation of works of art and antiquity in the Punjab, I recommend the establishment of a new division called the Architectural Division. An Executive Engineer, with special qualifications, to be appointed to the charge of this Division, and, as in the case of the North-Western Provinces, to be under the Chief Engineer, and his work carried on under the immediate orders of the Lieutenant-Governor issued through the Chief Engineer.

His first duty would, I think, be to put in hand the works and projects sanctioned by the Government of India, and to prepare any fresh projects for the protection of monuments which the local authorities recommend for preservation or renovation. The only difference that I would suggest between the new division and that already at work in the North-Western Provinces is that after initial measures for preservation or restoration are complete, the buildings should be handed over to the civil authorities for custody and keeping in good order.

The head-quarters of the Executive Engineer in charge of the Division should, I think, be at Lahore, with a sub-division at Delhi.

He should, I think, obtain the co-operation of the Mayo School of Art, and give employment to the pupils trained under Mr. Kipling, as far as possible, when delicate ornamental details have to be repaired. Attached to the Executive Engineer's Office there should be a photographer, who, if possible, should also combine the qualifications of head draftsman and restorer of paintings. A properly qualified man could be obtained for a limited engagement for Rs. 100 a month.

As regards the provision of funds, I beg leave to submit a suggestion that discretionary power might be given to District Officers who are interested in fine monuments and buildings to invite subscriptions from Hindus and Muhammadans. Large portions of the revenue are alienated for religious purposes, and it might be possible to make over some of the endowments for purposes of repairs and maintenance of temples and mosques.

Hi

Report on the Restoration and Preservation of Architectural Buildings in and near Agra.

Every visitor to Agra is aware of the great beauty of the monuments and buildings in the neighbourhood. The magnificent architectural works in Agra itself, at Sikandra, at Fatehpur-Sikri, at Bindrahan and in Muttra, attract crowds of visitors from all parts of the world and from every corner of India. Moreover, Mr. James Fergusson's well-known "History of Indian Architecture" has made these monuments familiar to the world at large.

Within even my recollection, Agra was, however, a vast area of splendid buildings more or less ruined.

When Sir William Muir became Lieutenant-Governor of the North-Western Provinces in 1868, he was concerned for the safety of the palaces in the Agra Fort, and directed me to inspect and report on them. (See Appendix D, page V.)

I found many in a dangerous state, and none that had not been somewhat defaced. Subsequently to this, works of restoration were commenced.

Sir John Strachey's Minute of 25th August 1875 alludes to the ruinous condition of the Fort buildings in 1874 and 1875, also to the work of restoration that had continued, and notices what had been spent by him up to 31st March 1875, the total being a little more than one lakh on buildings in the Fort, on the Taj, and at Fatehpur-Sikri.

I now have the pleasure, and the honour, of reporting on the marked further progress made in the last five years, through the establishment by Sir John Strachey of the Archaeological Division of the North-Western Provinces.

Buildings at Agra.—I visited Agra in April last, and found many works complete and many in hand. Mr. Heath, the Executive Engineer, is progressing very favourably, and the restoration and repair at the Taj, at the Fort, at Sikandra, at Itmad-u-Dowlah's tomb, and at Fatehpur-Sikri are highly satisfactory. I hope in a few months to visit the work which is going on at Jaunpur, at Bindrahan, and at Muttra; also to investigate the buildings in the Fort at Gwalior, which are unsurpassed for their beauty and historical interest, and urgently require attention. Mr. Heath is anxious to take up the latter work, and I think it would be a good and convenient arrangement that Gwalior should become part of his division.

Palace Buildings in the Agra Fort.*

Palace buildings in the Fort.

The *Moti Masjid* in the Agra Fort has been completely renovated.

This building is in truth absolutely perfect in style and proportion, and entirely of white marble. In 1868 I found vegetation hard at work on the roof and marble domes; and the ceiling and cornices underneath were falling and decaying through damp.

In 1868 access was impossible to the *Chittor Gates* in the *Mochi Bhawan*. They are valuable specimens of metal work, and can now be closely admired.

The small *Nagina Masjid*, which is at one corner of the *Mochi Bhawan*, is a beautiful marble building and has been placed in excellent repair. There is, however, a small marble kiosk near it which wants cleaning and putting in order.

The *Diwan-i-Am*, and its beautiful throne and chamber at the back, of mosaic work, is in capital order.

In 1868 this fine building was used as an armoury, crowded with stands of muskets; and to adapt it to such a purpose, windows of a European pattern were built in, and the whole of the interior columns whitewashed. Now the building has been thoroughly opened out, and is in appearance precisely what Shah Jahan made it.

The colonnade of the *Mochi Bhawan* is under repair and rapidly assuming its former and original state. In 1868 I found that the columns were nearly all fallen or threatening to come down, and the marble cupola on the east had been partially taken down as a measure of safety.

Leading from the *Mochi Bhawan* towards the river is a large suite of *Baths* recently opened out and found to be ruined. The various domed rooms were once painted, but whitewash covers the walls; and the marble window-frames overlooking the Jumna have been looted of their lattice-work. Measures will in due course be taken to repair this part of the Palace.

The repairs to the *Diwan-i-Khas* have been sanctioned, but are incomplete as yet. The inlaid work is here very fine, and the building itself is in the best style of Shah Jahan's time.

The copper-gilt roof of the *Saman Barj* is being relaid, and the whole building renovated in a satisfactory way.

The interior of the *Shish Mahal* has been partially restored, but is very dark; and without a torch or candle the mirror work and paintings cannot be seen. The introduction of the utmost possible light into the chamber from the side walls and the completion of the repairs will greatly improve this building. The coloured marble Dado will require very careful treatment.

Much remains to be done to the *Khas Mahal*. The ceiling of the front portion of the pavilion has been taken down and iron girders substituted. The marble ceiling will eventually be restored. The ceiling at the back is in disrepair, and the painted work will be preserved, not re-painted.

* "During the last three years the *Diwan-i-Am*, the *Diwan-i-Khas*, the *Saman Barj*, and other buildings have been restored to a condition of more or less complete security against further injury. Much work has been done, and is still going on, for the preservation of the *Jahangir Mahal*. The *Diwan-i-Am* has been opened out, it has ceased to be an armoury, and the disfigurements which Mr. Ferguson described with just indignation have been swept away. The last vestiges of whitewash will soon have disappeared. There still remain near the *Diwan-i-Am* some uncompleted gardens and other hideous buildings, which will not, I hope, last much longer."—(Extract from Sir John Strachey's Memoirs of 25th August 1873.)

The famous wooden *Somnath Gates* are at present outside the pavilion called the *Baag Mahal*. I think they ought to be carefully set up in the *Diwan-e-Am*, where they would be well seen, and preserved as much as possible from dirt and dust. A detail drawing should be made of this gate.

Repairs which are sadly wanted are just commencing to the *Angori Bayā* colonnade.

In 1868, I found the *Jahangiri Mahal* little better than a ruin, which climate and neglect were making worse.

Rain found easy access through upper floors and destroyed the coloured ceilings; whitewash covered the walls; and stone-work lay in heaps in the centre of the court. Now the beauty of the building can be appreciated, the whole having been built up and parts actually renovated.

I think further experiments should be made to clean off the whitewash which hides the painted walls. I am not acquainted with the process, but I believe whitewash has been successfully removed from old *frescoes* in France and in Italy; but this I can ascertain. As far as the stone carved-work is concerned, the whole has not been restored; but I hold that quite enough has been done for the maintenance of the structure without repeating the carved details at great cost.

The *Akhari Burj*, to the right of the *Akhas Mahal*, is being restored and nearly complete.

Jama Masjid.—The fine *Jama Masjid* lost its principal gateway in the mutiny; and the *Tirpola*, which was a walled

Jama Masjid.

enclosure between it and the fort, has been pulled down to find the site for the Rajputana State Railway station. What is left of the mosque is in fair order, but the interior walls above the marble *Dado*, which runs all round the building, are covered with whitewash. This building should, I think, come under Mr. Heath for petty repairs. It is well worth keeping intact and in good order.

The beautiful tomb of *Imad-u-Dowla* is in process of being completely renovated, and the work is nearly finished. The

Tomb of Imad-u-Dowla.

mosaic of the exterior walls had suffered terribly, but now has been renewed in a skilful manner. Something will be done to clean and preserve the splendid interior paintings. As I have pointed out, this kind of work will require an expert.

The grounds are not yet put in perfect order. The garden immediately round the tomb is somewhat looked after, but beyond this nothing has been done; and the enclosing wall and side buildings have yet to be repaired. Mr. Heath has made plans and drawings of this building, and the detailed drawings of the interior painted work will be most valuable.

Chini-ka-Roza.—The *Chini-ka-Roza*, beyond the tomb of *Imad-u-Dowla*, is

Chini-ka-Roza.

said to be the resting place of Afzal Khan, Shah Jahan's diwan. The building and surrounding grounds are much ruined and occupied by cultivators. The tomb itself is covered with beautiful tile-work in numerous patterns and colours, and should be preserved.

Fatehpur-Sikri.—A glance at the photographs Nos. 20 to 25 in the

book marginally referred to will show what was the ruined state of Fatehpur-Sikri in 1869. Now all the most important buildings are well in hand and approaching completion under Mr. Heath's direction.

* At Fatehpur-Sikri the arches at the south-east corner of the Dargah, which had shown signs of failure, have been strengthened. I am sorry to say that the great archway, perhaps the grandest building of its class in existence, is said to require much more. Both at Fatehpur-Sikri and at Akbar's Tomb at Sikandra a great deal has to be done. (Extract from Mr. John Strachey's *Memoirs* of 1875.)

The colonnade of the *Fatehpur-Sikri mosque* has to receive some trifling repairs. Some of the marble inlay in the western gateway requires renewal, and chajjas are broken inside and outside the quadrangle. The beautiful tomb of *Salim Chisti* is in good order, but the interior paintings require attention to keep them well preserved. The interior of *Nasuh Islam Khan's* tomb is whitewashed and wants cleaning; the gateway near this tomb and facing the *Baland Dargaza* wants repairs, and the renewal of inlaid marble and tile-work.

The painted decoration on the walls of the *mosque* ought, I submit, to be protected, but not renewed.

The *Baland Dargaza* is now in a very good condition, the principal archway having been strengthened and made good. This is a most creditable piece of restoration.

Outside the principal mosque is *Shah Salim's original mosque*, with bracket pillar, somewhat similar to the one in his tomb. This curious building should be preserved.

In the masonry chambers underneath the mosque and all over the ruins a number of durr-weavers are employed; and it occurs to me that some of the unoccupied buildings might be used for an Industrial Art School for stone-carving, if such an institution could be made self-supporting, or be established on a practical basis. The ground round *Abul Fazl's two houses* is overgrown with jungle, which remains to be cleared away.

The *Hathi Pol* is about to be repaired. The *Zerana Masjid*, between the *Jodh Bai's house* and the *Hathi Pol*, requires repair. The *Parach Mahal** wants repair, and the staircase leading to the top is unsafe. The *Diwan-i-Khas* is undergoing repair; but the *Diwan-i-Am* wants putting in order and further ruin arrested. The *Turkish wife's house*, which is exceedingly beautiful and rich in carving, has yet to receive from Mr. Heath its share of attention.

The *hauz* of the *Khas Mahal* wants cleaning out and repairing.

Akbar's *Khwaslah* requires cleaning out; and his *kutcherry*, now the *dak bungalow*, wants attention, much of the screen-work being broken.

The *Jodh Bai* place has to receive some petty repair, and it will be an improvement to open out the various doorways, which were closed up when the building was used as a tahsil. At present there is only one way of getting into the building.

What remains of the painted work on the walls of *Miriam's house* should be preserved.

The grounds all about the *Fatehpur-Sikri* buildings have been vastly improved by clearing debris and planting trees, but more can be done with advantage. It would also be a good thing to have the name of each building put up.

Sikandra.—Great damage is said to have been done to the buildings at Sikandra when Lord Lake took Agra in 1803. The minarets of the gateway had their tops knocked off, and the beautiful tomb building suffered greatly.†

The principal entrance at Sikandra has been greatly improved by the restoration of its handsome inlaid work. The interior of the gateway has yet to be cleaned out, as well as the buildings which flank it. The whole wall and the three other gateways surrounding the tomb require preservative measures. The grounds

* In 1870 I had casts made of columns in the *Parach Mahal*, of the throne column in the *Diwan-i-Khas*, and of columns and carvings in the *Turkish wife's house* (see list of buildings in the neighbourhood of Agra). These are all exhibited at the India Museum in London.

† This I find to be incorrect: the damage was done before Lord Lake's time.—H. R. C., 29-8-82.

are much improved by Mr. Lawrence,* the Collector, but a great deal remains to be done when funds are available. The mausoleum itself has been put in splendid condition, and the repairs are nearly completed. Work is still going on in the lower colonnade at some of the small tombs. The vestibule leading down to the actual resting-place of Akbar has beautiful, painted work in the dome and on the walls, which will no doubt receive preservative remedies.

The Taj.†—The entrance gateway of *the Taj* has been repaired most successfully, and the enclosing walls of the gardens are now being put in order.

The mosque and its pendant, or "Jawab," are in good order; but in restoring and renovating the interior paintings great skill and care are necessary. Decorative painting is almost as obsolete an art in Lahore, Delhi, and Agra as the tile-work for which their buildings are renowned; but the difficulties of successfully renovating decayed and faded frescoes are not insuperable, and I have no doubt that men can be found, perhaps in Kashmir, but certainly in Persia, who can do the work.

The *Taj* itself has been most successfully repaired, and shines out in all the glory of the original conception.

The actual tombs of Shah Jahan and his wife, in the crypt, have yet to receive slight repairs to the mosaics and some of the mosaic work in the chambered corridor above wants attention.

Gardens at Agra.—The garden at the Taj is most beautifully kept up, but the water channels and fountains are often empty; and seeing that a canal is no great distance off, it would bear improvement to bring water straight into the garden, instead of trusting to raising it from the river by bullock-power. The gardens at Sikandra and at *Ibad-u-Daulah* stands in need of larger expenditure than can be afforded from local funds at the disposal of Mr. Lawrence, the Collector; and it would greatly enhance the value of the restoration of the buildings at those places if sufficient money were granted to permit of the enclosures being put in substantial order, after which local resources can keep them up.

Mr. Heath has got some 100 plans and drawings of the buildings in his charge for preservation, and they form a valuable means of studying native architecture. It would, I think, be advisable in time to more profusely illustrate ornamental details of tile-work, painted decorations, carvings, metal and wood work; but I am strongly of opinion that the drawings should be reproduced in the best possible style and published in single plates for use in schools of art throughout India and for sale to artisans. Before suggesting that Government should sanction any particular sum for the purpose, it would be advisable to send one drawing to a publisher and to get a specimen done and an estimate of cost. The best publishing firm in the world for architectural and art works is Morel

* The grounds were a mere waste when Mr. Lawrence commenced to clear them, and the jungle exceedingly thick on one side of the mausoleum.

† "Great attention has been given to the Taj. The restoration of the eastern facade has been almost completed. The broken masonry of the walls and ruined openings have been replaced by new stone, and the renovation of the inlaid work has been steadily going on. The interior of the building is now in an almost perfect condition. The great gateway has been repaired, and its pinnacles, which had fallen or been thrown down, have been re-erected. Notwithstanding all this, it will take several years of careful and patient labour before the Taj and its surrounding buildings can be placed in a thoroughly safe and satisfactory state."—[Extract from Sir John Strachey's *Memorandum of the Taj* (1874).]

& Co. of Paris; and the reproduction of these drawings could be entrusted to them with great confidence in a satisfactory and highly creditable result.

H II.

Memorandum on the Conservation of Ancient and other Architectural Remains in India.

Lists of principal buildings.

The accompanying lists of buildings and monuments in—

Bengal,	Central Provinces,
North-Western Provinces and Oudh,	Hyderabad,
The Punjab,	Mysore,
Rajputana,	British Burma,
Central India,	Madras,
	Bombay, &c.,

which I drew up recently, have been compiled from official lists and from such books as Fergusson's *Indian Architecture*, Rousselet's *India and its Native Princes*, General Cunningham's numerous Reports, &c.

The information available from these sources is not entirely complete; but the buildings named are among those of the first importance, and are sufficiently numerous to convince even the least appreciative of the large field which exists for conserving the historical art monuments of India.

2. I use the word "conservation," because it seems to include all that

Conservation.

is required for the protection of works of art, and for the production of permanent and convenient methods for facilitating their useful study.

Under conservation may be included—

(1) Custody.

(3) Restoration.

(2) Preservation.

(4) Illustration.

Custody and preservation would appear to be duties which the local civil authorities could undertake satisfactorily, whilst the work of restoration and illustration would require a staff possessed of special qualifications.

3. *Custody* will take some time and trouble to organise properly: an unintelligent and sleepy chowkidar would be no efficient

Custody.

guardian. I would recommend that a corps of

native custodians be enrolled in each district according to requirements, selected, perhaps, from pensioned police or soldiers. They should wear a distinctive badge, and have clear instructions briefly engraved on it.

4. It would be of some educational benefit to compile for each administrative

District Manuals.

area a short and popular account of the most

interesting buildings and monuments. These, printed in English as well as the Vernacular, would possibly tend to create greater interest and respect.

5. It might also be worth while to affix to some of the most important buildings a notice in some imperishable material, such as enamel or glazed pottery, giving the name and date both in English and the Vernacular.

Nothing exposes a ruin to wanton ill usage so much as ignorance of its history, except, indeed, in the case of those who ought to know better, and who, if not deterred by authority, remove or chip off parts of a monument *because it possesses historical or artistic traditions.*

6. *Preservation* is a work which native keepers might partially attend to, as, for instance, in respect of—

- (a) cleanliness,
- (b) keeping down vegetation.

But

- (c) the removal of thick jungle without injury to old buildings,
- (d) clearing ruins of debris,
- (e) setting up fallen portions of a building,
- (f) collection of carved or other ornamental fragments,
- (g) erection of enclosures to keep off cattle, &c.,

would require periodical and special measures to be undertaken by district authorities.

7. *Restoration* is a work which could only be undertaken after the collection of very full information. It is in itself a very

delicate affair, for, unless it be first rate, is best left alone. The costly nature of such work is, moreover, a good reason for treating each case in detail and after full consideration.

8. Mr. James Fergusson could furnish a list of important architectural monuments which should be kept in a constant state of preservation or restoration, and I think he would probably include some of the following:—

Bengal—

List of some fine buildings that are worthy of repair or restoration.

Shir Shah's Tomb at Sasaram.
The Golden Mosque at Gaur.
The Adinsh Mosque at Maldah.
Temple at Sadri at Parimath.
Temples in the Puri District, Orissa.

The North-Western Provinces and Oudh—

The Jama Masjid at Badam.
* Jama Masjid at Jampur.
* Atala Masjid at Jaunpur.
* Akbar's Palace, &c., at Fatehpur-Sikri.
* Temple of Govind Deva at Bindrahan.
* Akbar's Tomb at Sikandra.
* Palace buildings in the Agra Fort.
* The Taj Mahal, Agra.
* Tomb of Imad-u-Dowlah, Agra.
Hall in the Fort at Allahabad.
Temple of Vishveshwar at Benares.

The Punjab—

The Kutub Minar, Delhi.
 Humayun's Tomb, Delhi.
 Jamia Masjid, Delhi.
 Palace buildings in the Fort of Delhi.
 Golden Temple at Amritsar.*
 Tomb of Ranjit Sing at Lahore.
 Palace buildings in the Fort at Lahore.
 Tomb of Jahangir at Shahdara, Lahore.
 Shah Gardex in Multan.
 Shah Shams's Talwar in Multan.

Rajputana—

The Arhai-din-ka-Jhompson, Ajmir.
 Tower of Victory at Chittor.
 Jaina temples at Mount Abu.
 Palace at Amber, near Jeypore.
 Palaces, Udaipur.

Central India—

Railings and Gateways of the Great Tope at Sanchi.
 Palace buildings in the Fort at Gwalior.
 Tomb of Maharajah Ghaus at Gwalior.
 Temples at Khajuraho.
 Jain Temples at Gwalior.

Central Provinces—

Remarkable Temple and circular enclosure at Bhera Ghat.
 Ruins at Karanbel near Towar.
 Fine Temple at Janjgir.
 Temples at Markundi.

Hyderabad—

The Kyles at Ellora.
 Caves at Ellora.
 Caves at Ajunta.
 Temples at Maskur, Berar.

Maisur—

Temples at Huhbid.
 Temples at Behar.
 Jaina Bastis at Sravana Belgula.

British Burma—

Information too meagre.

Madras—

The Seven Pagodas, Madras.
 Temple at Chillumbaram, South Arcot.
 Hampi.
 Tope at Amravati.
 Tirumala Naik's Palace at Madras.

Bombay—

Temple at Ambarnath.
 Buildings at Bijapur.
 Buildings at Ahmedabad.
 Temples at Parudkal, Dharwar.
 Mosque and Tombs at Tatta, Sind.

* The Sikhs contribute liberally towards the maintenance of this building, and restorations are going on. When I visited the temple on the 11th April last, the place was so thronged with natives that I had no opportunity of closely examining the building.

9. The collection of illustrative matter has an importance quite apart from historical or archaeological interest, as it is by such means alone that the architecture and art of India can be studied. Builders and artisans of this great country cannot be expected to keep alive the instincts of their styles, except by making themselves acquainted with the varieties of the ancient and modern arts of India. (In connection with this subject, I lately drew up a brief note on industrial art, which I submitted to Government. See Appendix G, page xvi.)

Duties of a Conservator of Ancient and other Architectural Remains in India.

10. To inaugurate the scheme of conservation, it will be necessary to select a Conservator, whose duty it should be—

- (a) to convey to Local Governments and Administrations the wishes of the Government of India concerning the custody and preservation of buildings;
- (b) to arrange for the production of local manuals, &c.;
- (c) to inspect buildings with the view of advising Government as to the measures necessary for repair or restoration;
- (d) to direct operations of draftsmen for the purpose of collecting illustrations of Indian ornamental art.

11. For repair, restoration and illustration, a special organisation will be required for various localities. There can be no better plan than the constitution (after the plan of Sir John Strachey) of a special charge in the Public Works Department of each great Province for the preservation of works of art and antiquity.

In many cases of repair, &c., Local Governments have no better agency than that of the Public Works under their orders; but it is only by those who take an interest in such work that it can be properly carried out.

Mr. Gibbs of the Bombay Civil Service, when Assistant Commissioner under Sir Bartle Frere in Sind, arranged for the repair of the Jama Masjid at Tatta, and says, in a Minute on the Bombay Archaeological Survey dated June 1873, that he got the work done by enlisting the sympathies of the Muhammedan community; and it was afterwards estimated that the cost would have been four times the amount if the repairs had been done by the Public Works Department.

12. For special repairs, preservation and illustrations it will probably be necessary to create divisions similar to that in the North-Western Provinces for—

- | | | |
|----------------------|-------------|----------------|
| | (1) Bengal. | |
| (2) The Panjab. | | (4) { Bombay.* |
| { Central Provinces. | | { Haiderabad. |
| (3) { Rajputana. | | { Madras. |
| { Central India. | | (5) { Mysore. |

In anticipation of the appointment of these establishments being sanctioned, I would recommend that some of the buildings under the immediate jurisdiction of the Government of India, mentioned in paragraph 8, should be visited with the view of ascertaining the means and approximate cost of undertaking necessary repairs or restoration.

* Major Munt, B.E., was appointed Curator of Ancient Buildings for the Bombay Presidency in 1878, and was working in correspondence with Mr. Burgess, the Archaeological Surveyor in Bombay. Enquiry will be made as to how far he has been able to undertake repairs, and whether he has any, and what, establishment.

13. General Cunningham in 1874 made the recommendation that all ancient buildings not in use for worship should be placed under the sole charge of the chief civil authority of the district; but it is specially in the case of fine buildings associated with military establishments that very clear ruling is required as to what should be in the charge of the civil authorities. All buildings of historical or artistic interest in forts like those at Delhi, Lahore and Gwalior, should be taken out of the charge of the military authorities and placed in the charge of the Local Government. At Agra the palace buildings and other works of art in the Fort are in the charge of the Executive Engineer of the Archaeological Division of the North-Western Provinces; and this arrangement presents no difficulties, as in any case of disturbance the whole of the buildings would, like those in the city of Agra outside the Fort, come under military occupation and charge, and the civil authority temporarily superseded.

In Madras the custom is to consider the charge of all buildings of historical or architectural interest to be vested in the revenue officials of each district, excepting those that are under the Public Works Department for repairs.

There is no organisation yet established in Madras for either investigating or conserving the wonderful and beautiful monuments of that Presidency.

14. As far as the discovery of buried ruins or works of art is concerned, the Act for the Preservation of Monuments. Treasure Trove Act of 1878 appears to furnish the civil authorities with all necessary power for dealing with valuable carvings, inscriptions, coins, or other discoveries; but in regard to the preservation of buildings and monuments, unless existing legislation is sufficient, an Act similar to Sir John Lubbock's would seem requisite.

H III.

Bengal.

Some Principal Ancient and other Native Architectural Buildings in the Lower Provinces of Bengal.

Name of building or group of buildings.	General description.	Country.	Preservation.	Illustrations.	Photographs.	Drawings or plans.
BURDWAN DIVISION.						
<i>In the official list some 24 subjects of interest are described.</i>						
Temple of Bahara, at Burdwan; 18th century, the Gop, destroyed in 1815; square, said to be buried here.	Built 200 years ago; the tomb of a Brahmin; post-Buddhist; Sak-Yue.	Quaintly desecrated	—	—	None.	None.
Shikarpur Temple, in the Burdwan District.	Brick and terra-cotta; buildings; history unknown.	Ditto	—	—	None.	None.
The so-called "Five Jewelled" Temple at Ghatiga, in the Midnapur District.	About 125 years old; said to be very ornamental.	Ditto	—	—	None.	None.
Khalargach, in the Midnapur District.	A fort facing 1400 A.D., with two rising sculptures of a man and his wife on horseback.	Ditto	—	—	None.	None.
Monarch at Fardnah, in the Hughli District.	A tower, probably of victory, used as a military, an interesting ruin; date thirteenth century.	Ditto	—	—	None.	None.
PRESIDENTCY DIVISION.						
<i>In the official list some 24 subjects of interest are described.</i>						
Walia Temple, latter Deol, at Dismund Bahara, 24-Pargannas.	A specimen of very fine brick-work; the bricks said to be carved; probably terra-cotta; date 975 A.D.	Quaintly desecrated	—	—	None.	None.
The hot Ghatiga, or Bhatiga Temple, at Ghatiga, in the Jessore District.	A massive brick building, date about 1400 A.D.; built by Khanda A.D.	The temple is kept clean by an old man, who gets money from pilgrims.	—	—	None.	None.
Pir Ali's Tomb at Bagaria, in the Jessore District.	Date about 1400 A.D.	In charge of two fakirs, who keep the highest of the plain under a very ancient grove.	—	—	None.	None.
Temple of Kollha, at Mochamb, 14, in the Jessore District.	An elegant building with tower and terra-cotta ornament; date 1400 A.D.	Quaintly probably date 1400 A.D.	—	—	None.	None.

BRACHALPUR DIVISION.

In the official list some 35 objects of interest are described.

		Carefully necessary	Pale preservation		Notes known
The Khajuraho Masjid, or golden mosque, at Gwal, Malabar District.	A stone building, 275 years old, built in the reign of Sultan Hassan Shah, King of Gwal.	Carefully necessary			Notes known
Mosque called the Kachari Masjid at Gwal.	An interesting and brick building about 200 years old; the work is said to be sacred but not so in reality, terra-cotta or other "moulded" bricks.	Not known; worthy of study.	Worthy of being kept safe.		See Ferguson
Minar at Gwal	According to Ferguson, a pillar of Victory; date 1252 A.D.	Carefully desirable	Wants clearing of vegetation or will tumble down.		See Davidson.
The Ghalib Mosque at Gwal	Remains of a fine stone building; 24 feet high.	Ditto	The high was altered by Government in 1872, preservation seems desirable.		Notes known
Kachari Masjid at Gwal or Panchgiri, in the Malabar District.	An enclosure containing many tombs and Kachari's dwelling houses, in which are several trees.	The place is held sacred with a number of sacred trees.			Notes known
The Adil Shahi Masjid and Tomb of Panchgiri at Panchgiri, or Harnet Panchgiri, Malabar.	Excellent 17th-18th century, decorated with tiles and carvings in stone. It is the finest and best example of Bijapur-Panaji.	Carefully desirable	Builded		See Ferguson
Monument of Jhalid-ud-din Muhammad at Harnet, Panchgiri.	A fine example of the Bijapur-Panaji.	Ditto			Notes known
Jama Masjid at Harnet, a mile from Panchgiri in the Malabar District.	A beautiful building, built in 1600 by Jhalid-ud-din, Akbar's Sultan of Bijapur.	Ditto	In bad condition		Notes known
Jama Masjid at Panchgiri, north of the Panchgiri hills in Bijapur.	A place of Jain pilgrimage	Ditto	Preservation desirable		See Ferguson, who would acquire.

CHITTAURGARH DIVISION.

In the official list some 12 objects of interest are described.

No building, which appears of special interest.

Principal Ancient and Architectural Buildings, &c.—continued.

Name of building or group of buildings.	General character.	Condition.	Preservation.	Restoration.	Particulars.	Drawings or plans.
PATA DIVISION.						
For the ground that some 600 square of land are devoted.						
Kalanda Monastery at Bazarang, in the Patna Division.	Building ruins, full of interest; many sculptures of great beauty.	Information; ruins—very many ruins.	Ruins	—	—	None.
Relics of Hindu in Bihar subdivisions, in the Patna Division.	Religious ruins of Hinduism, the present remains of a temple.	Condition variable	—	—	—	See Cunningham.
Relics and great Buddhist Temple at Rajahmundry, in the Gya Division.	The temple is a fine and most interesting brick building, many of the carved sculptures are found around the main and five century B.C.	—	—	—	—	See Cunningham and Ferguson, and Rajahmundry, India.
Buddhist Temple and Caves in the Rajahmundry Division, in the Gya Division.	The caves are carved in the granite rock, and very in age from the 1st to 3rd B.C., among them, the "Buddhist" or "Gya" Caves, the "Buddhist" and "Lama" Caves.	—	Good.	—	—	See Ferguson and Cunningham.
Buddhist remains at Bhagalpur, in the Patna Division, in the Gya Division.	Extensive remains of the present city, many a small temple with a standing figure of Buddha, many a small temple with a standing figure of Buddha, many a small temple with a standing figure of Buddha.	Condition variable	—	—	—	None known of.
Relics of Hindu in Bihar subdivisions, in the Patna Division.	Religious ruins of Hinduism, the present remains of a temple.	Condition variable	—	—	—	India.
Relics of Hindu in Bihar subdivisions, in the Patna Division.	Religious ruins of Hinduism, the present remains of a temple.	Condition variable	—	—	—	See Ferguson.
Relics of Hindu in Bihar subdivisions, in the Patna Division.	Religious ruins of Hinduism, the present remains of a temple.	Condition variable	—	—	—	None known of.
Relics of Hindu in Bihar subdivisions, in the Patna Division.	Religious ruins of Hinduism, the present remains of a temple.	Condition variable	—	—	—	See Ferguson, Cunningham, and Rajahmundry.
Relics of Hindu in Bihar subdivisions, in the Patna Division.	Religious ruins of Hinduism, the present remains of a temple.	Condition variable	—	—	—	See Ferguson and Cunningham.

ORISSA DIVISION.

In the official list some 25 objects of interest are described.

Place or object of interest.	General character.	Curiosities.	Notes.	Remarks.	Notes.
Hindu Temple at Chandrasekar Jagur, in the Orissa District.	A stone column about 22 feet high, supported by a square base, which has half a mile off.	Curiosities desirable.	—	—	Some known.
Temple of Jagannath at Puri, in the Orissa District.	Built 1110 A.D.	—	—	—	—
Great Temple at Shrikrishna, in the Orissa District.	Dated about 1110 A.D. in very old Sanskrit script.	—	—	—	—
The Hindu Temple at Puri, in the Orissa District.	Dated about 1110 A.D. in very old Sanskrit script.	—	—	—	—

CHOTA NAAGPUR DIVISION.

In the official list some 13 objects of interest are described.

Place or object of interest.	General character.	Curiosities.	Notes.	Remarks.	Notes.
Hindu Temple at Chhatrapur, in the Orissa District.	A stone column about 22 feet high, supported by a square base, which has half a mile off.	Curiosities desirable.	—	—	Some known.
Temple of Jagannath at Puri, in the Orissa District.	Built 1110 A.D.	—	—	—	—
Great Temple at Shrikrishna, in the Orissa District.	Dated about 1110 A.D. in very old Sanskrit script.	—	—	—	—
The Hindu Temple at Puri, in the Orissa District.	Dated about 1110 A.D. in very old Sanskrit script.	—	—	—	—

* N.B.—The mixed Volume of Vols. 10.

Some Principal Ancient and other Native Architectural Buildings in the North-Western Provinces and Oudh.

Name of building or group of buildings.	General character.	Curiosities.	Preservation.	Restoration.	Photography.	Displaying of plans.
A stone bearing, one of a group of three, at the entrance of the temple at Benares, near the Ganges.	It is a good state of preservation; but the inscription is somewhat worn by age.	—	—	—	—	—
Large Pyramid of Benares and some of the other pyramids in the district.	It is in a good state of preservation; but the inscription is somewhat worn by age.	—	—	—	—	—

In the official list of 1875, 137 objects of interest are mentioned.

Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Country.	Preservation.	Restoration.	Photographs.	Drawings or plans.
KARNAL DISTRICT.						
<i>In the official list some of buildings are described.</i>						
Tomb near Karnal, on the Yamuna, locally called "Dargah" (Madrassah).	A massive enclosure, with a mosque and tomb, the tomb itself is a small building, but the mosque is a large building. It was built by Ghias-ud-din, Ruler of Delhi, in memory of a father (1327 A.D.).	North, place of Mohammedans, but no information as to country.	Good.	---	None.	None.
Mohammedan Tombs in the city of Panipat.	Decomposed with arches and pillars, 1445-1522 A.D.	South, Mohammedans (no information as to country).	Good.	---	None.	None.
Kabul Singh, 1 mile from Panipat.	Formerly a mosque and garden built by the Emperor Babur to commemorate the victory over Ibrahim Lodi (1527 A.D.).	No exact known of.	The garden has disappeared; the mosque requires repairs.	---	None.	None.
Mosque of Shahkhan, inside the city of Karnal.	A massive building of the time of Akbar, the cupola is covered with enamel.	Not known.	Requires repair.	---	None.	None.
HIMACHAL DISTRICT.						
<i>In the official list some of buildings are described.</i>						
Jama Masjid, in the Town of Haridwar.	A brick building 550 years old, the cupola is made of stone and is covered with enamel.	Good for many years, but the cupola is in ruins.	Fair.	---	None.	None.
Mosque near Haridwar in the road to the Delhi Gate.	A brick building 150 years old, decorated with enamel.	Good.	Fair.	---	None.	None.
Tomb near Haridwar.	An old domed brick building with a cupola. The decoration is said to be 200 years old.	Overgrown by a residence for the Deputy Commissioner.	Said to be much neglected.	---	None.	None.
Bara Darwaza, one of the gates of Haridwar.	A brick gate, decorated with enamel.	No information as to country.	Fair.	---	None.	None.
Doona Shrine at Tehri.	A brick building, decorated with enamel. The cupola is said to be 200 years old.	Not completed; no information as to country.	Fair.	---	None.	None.
Mosque in Tehri.	A brick building, erected 200 years ago by Mirza Asaf-ud-Daula, it is decorated with red, blue, and yellow tiles.	Good for many years, but no information as to country of the building.	Fair.	---	None.	None.

BOHTAR DISTRICT.

In the official list some 20 buildings are described.

Seven houses at Singher	These are of stone, Muhammadan in style, and the building has suffered destruction (1855?); about 200 years old.	Not known	—	—	None	None.
Alaungit Mosque at Hathi	A stone building erected by Alaungmy Thagun, about 200 years ago.	Used for worship; empty and in ruins.	—	—	None	None.

SINGU DISTRICT.

In the official list some 4 buildings are described.

Hindu Temple outside the town of Hama.	A plastered brick building, with tower on occasion, about 200 years old by report.	Used by Hindus; empty and in ruins.	—	—	None	None.
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URHALLA DISTRICT.

In the official list some 10 buildings are described.

Mahamandir Temple, 12 miles west of Mahabul Thana.	A masonry building, about 1750 A.D., in the town of Mahabul, and of an architectural character.	Used for Mahamandir; empty and in ruins.	—	—	By Local Parties, Association Committee, etc.	None.
Jama Masjid at Thimmar	A solid masonry building, 1800 A.D.	Used as mosque; empty and in ruins.	—	—	None	None.
Gateway of the Old Fort of Thimmar	Small masonry building, a good specimen of Muhammadan architecture, 1800 A.D.	Partly inhabited	—	—	None	None.
Mosque at Indawmy, 20 miles north-east of Uthulha.	Mosque masonry, date 1460 A.D.	Not in use	—	—	None	None.
Old Muhammadan House at Butha, 8 miles from Jaguila.	A masonry masonry house with tower of observation, built by Sultan Salim 1600 A.D.	Not in use	—	—	None	None.

SINGU DISTRICT.

In the official list some 3 buildings are described.

Three Mosques at Singher, a Temple according to some.	Very ancient; built of brick stone.	Not known	—	Impossible	None	None.
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MILL STATES.

In the official list.

Old Temples	Many very picturesque and extensive masonry houses in Hindu style, many of them very old, many of them of great antiquity, many of them of great antiquity.	—	—	—	—	—
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Time	Time	Time	Time	Time	Time
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2	2	2	2	2	2
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4	4	4	4	4	4
5	5	5	5	5	5
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8	8	8	8	8	8
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68	68	68	68	68	68
69	69	69	69	69	69
70	70	70	70	70	70
71	71	71	71	71	71
72	72	72	72	72	72
73	73	73	73	73	73
74	74	74	74	74	74
75	75	75	75	75	75

...	Expt in temple by the Hindu.	Revised photographs in lower Indian States.	Plates and reduced drawings are being prepared as rapidly as possible. H. E. C.
—	—	Has been photographed.	Plates and reduced drawings are being prepared as rapidly as possible. H. E. C.
Ditto	Ditto	None	None.
Ditto	Ditto	None	None.

AMERICAN DISTRICT.

24. The effort that you are making is commendable.

Shrine, Temple, and Pagoda.	Notes.	Famous for nothing and worthless.	Not stated.
Very ancient building	Ditto
Temple in the village of Phatnam ; very fine land.	Ditto
Temple in the village of Ghindri ; very ancient.	Ditto
Temple in the village of Manay Kazari ; a very famous temple.	Ditto
Temple in the village of Deor ; very ancient.	Ditto

<p><i>Red Temple and sacred Tank called Durgam, said to be the Tank of the goddess.</i></p>	<p>A modern building (1729 A.D.) of marble with a square gilt shrine, gilded and painted in red. The Temple is on walls and surrounded with kind devices of figures and flowers.</p>	<p>Used by the high priests.</p>
<p><i>Red Temple called Akat Temple at Aizawl.</i></p>	<p>A plastered brick building, with coloured decorations and the upper story covered with copper gilt plates; date 1600 A.D.</p>	<p>In religious use.</p>
<p><i>Green and Red called Baka Akat at Aizawl.</i></p>	<p>A brick and white stone building with solid decorations and gilt-work; a lofty tower is built over the tank.</p>	<p>Religious institution.</p>
<p><i>Black Temple beyond the Lohgarh Gully of Aizawl; 6440 2780.</i></p>	<p>A brick building situated on the Durgam Tank; fine carved decorations.</p>	<p>Used by tax-payers.</p>
<p><i>Red Temple, sacred built on the hill called Lohgarh, west of the Kanjowahampt about 1754 A.D.</i></p>	<p>Three brick buildings having colored decorations and carvings; this occurred from villages.</p>	<p>Always worthy of visit.</p>

LAWRENCE DISTRICT

For the full list of 100 buildings see Appendix.

Claudio—*no! no!* *Benedetto*, if you like I will
return to the Medici bank.

BAZARA DISTRICT.

In the official list some objects of interest are described.

Small District Co. Minor of Dist. 11	Apparently name	Valuing table value	Not known of	Not known of
Small District Co. Minor of Dist. 11	Apparently name	Valuing table value	Not known of	Not known of

MILFAN DISTRICT.

In the official list some objects of interest are described.

Small District Co. Minor of Dist. 11	Apparently name	Valuing table value	Not known of	Not known of
Small District Co. Minor of Dist. 11	Apparently name	Valuing table value	Not known of	Not known of

MONTGOMERY DISTRICT.

In the official list some objects of interest are described.

Small District Co. Minor of Dist. 11	Apparently name	Valuing table value	Not known of	Not known of
Small District Co. Minor of Dist. 11	Apparently name	Valuing table value	Not known of	Not known of

MONTGOMERY DISTRICT.

In the official list some objects of interest are described.

Small District Co. Minor of Dist. 11	Apparently name	Valuing table value	Not known of	Not known of
Small District Co. Minor of Dist. 11	Apparently name	Valuing table value	Not known of	Not known of

Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
MUZAFFARABAD DISTRICT.						
<i>In the official list there are the only two buildings described.</i>						
Tomb of Nawab Tahar Khan at Sargodha, on the Chindah, 40 miles from Muzaffargarh.	A brick building with minarets, one in green, black, yellow and blue; built in 1750 A.D. by Nawab Sultan Muhammad.	Not in the custody of the Government.	In good preservation; some repairs by the British authorities in 1867.	—	Has been photo-graphed.	None.
Tomb of Abdul Wahab at Dera Mo-hammadi, 40 miles north-west of Muzaffargarh.	A brick building with colored do-cuments; about 200 years old.	Under the custody of the Government.	A sub-city building of 40 ft. high is attached to the tomb; due to the decay of the tomb in the 17th century, the British authorities have been prohibited from being insufficient to keep the structure; the tomb has been repaired by the British.	—	Photo-graphed.	None.
DERA GHAM KHAN DISTRICT.						
<i>In the official list some 4 buildings, &c., are described. Nothing very important.</i>						
DERA ISMAIL KHAN DISTRICT.						
<i>In the official list some 2 buildings are noticed.</i>						
Fort at Umariat near Khyber.	Remains of masonry, supposed to be very ancient; Hindu or Buddhist.	—	In ruins.	—	None.	None.
BANNU DISTRICT.						
<i>In the official list 3 objects of interest are noticed.</i>						
Minaret of Bikan Talwar, Minarwall.	Remains of walls by the canal were built here by the Talwar in 1750, and several figures of stone, figures of elephants were arranged and sent to the Lahore Museum.	Under the custody of the Government.	—	—	None.	None.

JHELUM DISTRICT.

To the official list some 38 buildings, &c., are described.

Temple of Mallik, 14 miles north-west of Jhelum Dahan Bana.	A stone building of a type similar to Kashmiri temples. An iron inscription could be valuable; said to be 2,000 years old.	Curiously across desert—Bhina	.....	Said to have been photographed.	None.
Fires at Mirans, 11 miles north-west of Jhelum.	An old Muhammadan fort with a fine gateway.	Curious ruins used as a dwelling-house; were the gateway to a "traveller's" room.	.....	None.	None.

LAWAHIA DISTRICT.

To the official list some 14 buildings, &c., are described.

Muz, 30 miles north-west of Guernat, on the banks of the Jhelum.	A very old, plain; probably in Indian Greek style.	None.	None.	None.
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SHAMPUK DISTRICT.

To the official list some 11 buildings, &c., are described.

Mosque at Diers.	A plastered brick building around with unroofed oblongness; 100 years old.	Used by Muhammadans (dead); has lately been repaired.	None.	None.
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PESHAWAR DISTRICT.

To the official list some 13 objects of interest are mentioned.

Portico of Rindat on the hill above the village of Kumbhara, 10 miles north of the great plain station.	General Cunningham identifies it with Aconia. The last contains a large number of Buddhist statues and sculptures.	Remains of stupa and sculpture; very distinctive.	.....	.....	None.
Buddha Dandi near Mandas.	One of Ashoka's chief inscriptions, 2nd B.C. General Cunningham identifies the locality as the site of Indatara.	Curiously distinctive.	.....	.....	None known of.
Relics of Buddhist city of Takla-makhan, 10 miles to the north-west of Mervan.	Remains of a large city and temple, 3rd B.C. to 1st A.D.	Many sculptures remain of the Takla-makhan. The stupa removed a large number.	.....	Many sculptors have been photographed.	See Cunningham and Ferguson.
Relics of Buddhist city of Zhetysay, 7 miles to the north of Mervan.	None has been seen and inscriptions.	None.	.....	.....	None.
Buddhist Temple and Monastery, 7 miles from the village Kumbhara in the Peshawar, and 6 miles from the great plain station.	None has been seen and inscriptions.	Many sculptures remain of the Takla-makhan and distributed in the great plain.	.....	.....	None.
			.....	.....	See Cunningham.

Kashmir.

Some Principal Ancient and other Native Architectural Buildings in Kashmir.

Name of building or group of buildings.	General characters.	Curiosity.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Gardens at Muzoon Baf, 10 miles north of Srinagar.	Land not in Akbar's time; 300 years ago; the stone buildings are modern.	Curiosity desirable.	—	—	Photographed.	None.
Temples of Parnia, 12 miles north-west of Srinagar.	Date from 882 to 901 A.D.; handsome stone buildings with ornate carvings; the two finest are at Parnia; H. H. Cole, 1899.	—	—	—	—	—
Temple at Bhambur, west of Baramulla, and 12 miles beyond Narnia.	An interesting Hindu temple and residence of stone.	Curiosity for a fact; no regular society in the temple.	—	—	—	—
Hindu Temple at the Takhia, Parnia Hill, called Pishkawa.	A solid stone building, with three walls and a pyramidal roof; date about 220 B.C.	Curiosity desirable.	—	—	—	—
Gardens and Paradise called Chashma Chak, on the Jhelum, near Srinagar.	The tank is of stone and the Paradise is of wood and brick; built by Akbar.	Curiosity desirable.	—	—	—	—
Gardens and Paradise at Bhambur, near the Jhelum, west of Srinagar.	Built by Shah Jahan, in brick and stone.	—	—	—	—	—
Gardens called Jhelum Baf, on the Jhelum, west of Srinagar.	Built by the father-in-law of Shah Jahan, a beautiful garden, the best and finest.	—	—	—	—	—
Temple at Parnia, Hindu temple, west of Srinagar.	Beautiful Hindu temple, in stone; about 100 A.D.; stands in water.	—	—	—	—	—
Mosque of Shah Jahan, in Srinagar.	An interesting wooden building.	Curiosity desirable.	—	—	—	—
Jami Masjid in Srinagar.	A large building with wooden pillars and roof.	Curiosity desirable.	—	—	—	—
Hindu Temple at Parnia.	An interesting stone building.	—	—	—	—	—
Ancient Temple, 12 miles north-west of Srinagar; date 882 to 901 A.D.	Old stone and temples, partly ruined; the stone carvings are good; a most interesting relic of the Hindu temple in Kashmir.	Curiosity desirable.	—	—	—	—

Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Category.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Temple at Shaitan, 8 miles east of Islamabad.	The finest example of the old Kashmiri style of architecture, but in great ruin.	Excellent work, typical	Requires attention.	---	Photographed also	See Cunningham, Peshawar, Gila, &c.
Young Garden and Spring.	Built by Akbar, c. 1580, in one place, full of second fish.	The Hindu style carved the place, but it was some architectural work by the Hindus.		---	Photographed	See Cunningham and Gila.
High Temple at Wuzai, about 20 miles from Srinagar.	Old building of stone, dating from the commencement of the present century; it was much used of the city.	Excellent building	Requires attention, but it is not yet possible to do so.	---	Title	See Cunningham and Gila.

Rajputana Agency.

Some Principal Ancient and Native Architectural Buildings in the limits of the Rajputana Agency.

Name of building or group of buildings.	General character.	Category.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Chhatra Gave at Jhannu.	About 1000-1100 A.D., a rock cut temple.	Excellent building.	---	---	---	See Cunningham.
Chhatra Gave at Khori.	Probably the finest modern group of Hindu temples in India.	Excellent	---	---	---	---
Temple at Chanderprast, near Jala, Pata, Jhalawar.	About A.D. 1100, a beautifully carved temple.	Excellent	---	---	---	See Cunningham and Pata, Jhalawar.
Temple of Thul in Central India, Rajput Agency.	Temple of Thul, c. 1100, is situated on the banks of the river Chambal; it is a fine example of Hindu architecture.	Excellent	The architectural remains are well worth of preservation.	---	---	See Cunningham and Pata, Jhalawar.

[illegible]

Haiderabad.

Source of bird, or group of birds.	General characters.	Curiosities.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Texian Tanager, Rio Bahia, at Bahia.	One of the most singular and interesting characters in its plumage is the black stripe on the neck, like the one on the back.	Requires painting.	Has been damaged by Mahomedans.	—	—	See Desailly's <i>Faune of Madagascar</i> .
Crows at Ellora, Arracanah District.	600-100 A.M.	Crows desirable.	—	—	—	See Ferguson and Dainton's <i>Madagascar</i> .
Quail Crows at Ellora, Arracanah District.	Black-est temple; about 600 A.M.	Ellora.	—	—	Has been photographed.	—
Quail Crows at Algeria.	Black-est temple with colored feet, rose and lavender legs.	Have been kept since by the name of the French's Government.	—	—	Has been photographed.	See Gill, Ferguson, Harpiss, and others. Some of the pictures have been copied.
Asian Tanager at Auroch, near Algiers.	Reddish; carried down from	None.	None.	—	Photographed by Major Gill.	—

Principal Ancient and Architectural Buildings, &c.—continued.

Name of building or group of buildings.	General character.	Curiosities.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Chalukyan Temple at Bhairangpalli.—	A temple near Hyderabad, pulled by Jangams, the most complete form of a Chalukyan temple.	Curiosities doubtful.	None.	—	Has been photo-graphed.	—
Four Hindu shrines or stone Golu-ways in Wazirpur.	Dated about 1100 A.D. by Travancor India.	Apparently in good con-dition.	—	—	Have been photo-graphed.	—
Temple at Wazirpattanam in the Wazirpur District.	Erected in 1100 A.D., an elaborate example of Chalukyan architec-ture.	Curiosities doubtful.	—	—	Has been photo-graphed.	—
Shrine at Sullurpalli.	1371-43; a remarkably well-preserved building, the whole of the area being covered by it.	Repairs are about to be undertaken by the State's Government.	—	—	Ditto.	See Ferguson.
Temple of the Lord Shakti Devaraya at Indur.	1002-1008 A.D.; interesting build-ing; not illustrated or drawn by any one.	—	—	—	—	—
Temples said to be Jain at Mukha-giri in Jangam, near Gopalpur.	All of the modern dated style.	—	—	—	—	—
Temple at Mallam, Madras District.	A large temple with Jain columns.	—	—	—	—	—
Temple at Marri, Madras District.	Thence, 1005. Hindu building in Dravid style.	—	—	—	—	—
Temple at Marri, Madras District.	Dravid style with sculptures (see Mr. Levy's account in the <i>Dravidian</i> , page 100).	—	—	—	—	—
Group of Jain Temples at Mukha-giri, near Hyderabad.	A beautiful group of buildings well-watered.	—	—	—	—	—

Some Principal Ancient and other Native Architectural Buildings in the Maharajah's territory, Maisur.

Name of building or group of buildings.	General character.	Curiosities.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Jain Shrine at Tramar.	This image is 40 feet high.	Curiosities doubtful.	—	—	Has been photo-graphed.	—
Jain Shrine at Mysore, Mysore, and Seringapatam.	This statue is 70 feet high. Well-preserved, and is one of the most of the style of Seringapatam, 1700.	Ditto.	—	—	—	—

There are 13 of these temples, which are more or less of monumental masonry.	Some known; we will take them in order.	Information waiting—	Has been photo-graphed.	Some
Temples at Sarrana, Balappa, near Srirangapatna.				
Temples at Shivalaya.				
Great Temple at Halakki, com-menced about 1224 A.D.	Built by Yandya Raja, in 1202 A.D.; very elaborate shrine, with sculpture in stone.	Said to be in charge of the Assistant Commis-sioner, Madras Division.	Done.	See Photographs, 10119.
Temples at Drove in Malabar, near Thalassery.	A double Hindu temple of great height and elaboration.	Said to be in charge of the Assistant Commis-sioner, Madras Division.	Done.	—
Chalukya Temple, called Kasi Zee-nah, at Halakki in Malabar, erected in the 12th century.	A Chalukya temple, with wonder-fully elaborate sculpture; built in 1114 A.D.	Done.	Done.	—
Colossal Jain statue at Ravala.	Covered with sculptures of the best class of Indian art.	Done.	Done.	—
	This image is 41 feet 8 inches high, date 1302 A.D.	No information.	—	—

Burma.

Some Principal Ancient and other Native Architectural Buildings in Burma.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Pyaw Oo, Thavon, about 40 miles north of Mandalay.	The ruins at Thavon have been described by Mr. Andrew St. John, and are very extensive; the principal pyaw is adorned with the most exquisite sculptures; date probably before 14th century.					
Buddhist monasteries at Nyaung U.	Pyaw Oo is a collection of the best Buddhist in Burma style 107 A.D., and is under regular investigation.					

No official list yet furnished.
[See Ferguson's *Indian Architecture*.]

Principal Ancient and Architectural Buildings, &c.—*contd.*

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photogenesis.	Drawings or plans.
Basilican Pagoda at Tanjore	Called the Great Pagoda; date about the 14th century.	.....	In charge of the Engineer of Tanjore.	.....	Has been photo-graphed.	See Fragment, the title would be value-able.
Bricktemple Temple at Sallavaram, District.	Date about 18th century; covered with extremely beautiful.	.....	Edile.	.....	Done	Objects would be valuable.
Group of Temples at Chidambaram in the Tanjore District.	A finely ornamented group of Dravidian architecture.	.....	.....	.....	Done	Details wanted.
Basilican Temple of Rameswaram, near Pichavaram.	A very large, well-known temple; a curious cluster of buildings built within the limits of the 18th century.	Good for several persons; a great number of pilgrims.	Private for repairs in hand.	.....	Frequently photo-graphed.	.....
Great Temple at Madurai	.....	In use	Edile.	.....	.....	Drawings have been prepared in the office—H. H. C. 4-5-02.
Temple of Nalanda's Palace at Madurai	Dating from 12th-13th A.D.	.....	Repairs in progress. The Palace is being surrounded with a wall of stone.	.....	Has been photo-graphed.	See Fragment, the title would be value-able. Office—H. H. C. 4-5-02.
Basilican Temple of Rameswaram in the Island of Pambol in Madurai	Has some beautiful carvings; about 18th A.D.	.....	Has been used, the ground by building of a wall. Private for repairs in hand.	.....	.....	Drawings in the office—H. H. C. 4-5-02.
Pagoda at Sempadi, in the Chidambaram District.	A small round pagoda with some fine stone carvings and paintings.	.....	.....	.....	.....	.....
Temple at Tirumal	An enclosure 300 feet by 700 feet	.....	Preservation desirable	.....	.....	See Fragment.

Bombay Presidency.
Some Principal Ancient and other Native Architectural Buildings in the Bombay Presidency.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Illustrations.	Photographs.	Drawings or plans.
<i>As per official list forwarded by Mr. Burgess in 1875 under the plans of interest are annexed.</i>						
Cave at Bhigwan, Bombay	Dates from the middle of the eighth century; ancient Hindu sculptures.	Systematic custody; Es. despatches; in charge of Executive Engineer, Bombay Division.	None, work has been formerly cleared.	.....	Has been photographed.	See Burgess.
Chattras at Kumbhar, on the island of Salsetty, Bombay.	A rock-cut Bhikkhu temple; about 800 A.D.	Custody desirable.	Fair.	.....	.....	.....
Chattras Cave at Nandi, Bombay	A rock-cut Buddhist temple; about 100 B.C., with sculptures and capitals.	Ditto	Fair.	.....	Has been photographed.	See Ferguson.
Temples called Ashokvathi, near Kalan, Bombay.	Dating about 500 A.D., built by the sculptors here; been much cut and damaged; though small, it is fairly sacred.	Custody desirable. No positive model; a project under discussion.	.....	.....	None.	See Daniell, Green; note under his volume.
Nandi Temple at Purna, Bombay	A Hindu rock-cut temple of plain design.	Ditto	.....	.....	.....	See Daniell.
Chattras: One of, known as the Bhav Bhav.	A handsomely rock-cut temple; 75 B.C.	Requires to hand.	.....	.....	Has been photographed.	See Ferguson.
Chattras Cave at Nandi, D. with Es. Kumbhar, in the Bhav Bhav.	A rock-cut temple with uncoloured capitals.	Ditto	In charge of Executive Engineer, Purna Division.	.....	Ditto	See Burgess and Ferguson.
Chattras Cave at Nandi, in the Bhav Bhav.	A rock temple dating before the Christian era; carved out of the rock; no sculptures.	Custody desirable.	.....	.....	Ditto	Ditto.
James Wall at Bhigwan, in the Salsetty Collection.	125-170 A.D.	Requires to hand; the Es. should be made; the sculptures of the building cleared.	.....	.....	Ditto	See Ferguson and A. Cunningham; also Es. of the Architecture of Bhigwan.
Peak of Nandi at Bhigwan, in the Salsetty Collection.	125-160 A.D.; a very extensive square building.	.....	.....	.....	Ditto	.....

Principal Ancient and Architectural Buildings, 88.—contd.

Name of building or group of buildings.	General character.	Quantity.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Tomb of Muhammad at Hyderabad, in the Khairat Collection.	10th-11th A.D., remarkable for simple proportions and unadorned building.	Will be repaired.	.....	.....	Has been photographed.	Has Hays's drawings.
Zame Masjid at Ahmedabad, Bombay.	About 1411 A.D., a fine building, Saracenic in style.	.....	.....	.....	.....	.....
Queen's Mosque at Hyderabad, Ahmedabad Collection.	Very fine building, Saracenic in style.	.....	.....	.....	.....	.....
Tomb and Shrine of Nizamuddin at Hyderabad.	1450-1460 A.D., fine building, Saracenic in style.	.....	.....	.....	.....	.....
Tomb of Nizamuddin, Hyderabad, Ahmedabad.	Built in 1465 A.D., Saracenic in style.	.....	.....	.....	.....	.....
Tomb of Syed Ghous, Ahmedabad.	Built about 1460 A.D. by Mahmud Beglar, Saracenic in style.	.....	.....	.....	.....	.....
Tomb of Mahmud Beglar, near Khairat, Ahmedabad.	About 1460 A.D., Saracenic in style.	.....	.....	.....	.....	.....
Mosque of Mahabat Khan, Ahmedabad.	Saracenic in style.	.....	.....	.....	.....	.....
The Zame Masjid, Ahmedabad.	.....	.....	.....	.....	.....	.....
Unfinished Mosque in the palace of Ahmedabad, Ahmedabad.	Beautiful specimen of window tracery in this building.	.....	.....	.....	.....	.....
Zame Masjid at Ahmedabad, Bombay.	Finished in 1460 A.D.	.....	.....	.....	.....	.....
Malia Temple at Modlihal in Khairat, Bombay.	The exterior are very modern in appearance, although in plan the interior shows typical in the most characteristic manner.	.....	.....	.....	.....	.....
Zame Masjid at Ahmedabad, Bombay.	A handsome carved stone pillar.	.....	.....	.....	.....	.....
Zame Masjid at Ahmedabad, Bombay.	Known as the Zame Masjid.	.....	.....	.....	.....	.....

Bombay Presidency.

Principal Ancient and Architectural Buildings, &c.—contd.

Name of individual or group of buildings.	General character.	Cause.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Mongkut and Sudda of Tatta in India, 1872-1890, Bombay.	The tomb of Namsi Amir Khan, Durrani, is at Tatta, surrounded with beautiful colored tiles.	To custody of the Mohammedans at Tatta.	.....	Extensive room- rented in 1905 to Sir Burrell Pym of a and 50 lbs. 6,000, this was actually carried out in 1907.	Has been photo- graphed.	Details would be valuable.
Lal Shah Pao, a Masjid in the north-east corner of Malabar in the Kanara District.	Build of red brick, lately gradually decayed with colored tiles; built about 1840 A.D.	Occupied by Muslims, and considered very sacred.	No information.	.....	None.	None.
Kwaja Ghar, and Pir at Bahat on an island opposite Makke.	Built by A.D.; covered with tiles of all colors and patterns.	No nobody; a guardian much wanted.	Preservation necessary.	Irreparable.	None.	None.

I

Extract from the Proceedings of the Government of India in the Home, Revenue and Agricultural Department (Surveys), No. 30-42, dated Fort William, the 2nd February 1881.

OBSERVATIONS.—Her Majesty's Secretary of State having sanctioned the appointment of a Curator of Ancient Monuments, whose duties will be to superintend, under the Supreme Government, the conservation of the most celebrated and important examples of national archaeology and architecture throughout India, the Governor General in Council is pleased to appoint Captain H. H. Cole, R.N., to be Curator, and to direct him, in communication with the Local Governments and Administrations, to inspect the principal monuments throughout India, the historical and archaeological value of many of which has been brought to notice by General Cunningham and the other officers engaged in the Archaeological Survey of India, in order to frame a scheme for their protection and conservation.

2. The national buildings of the Indian Empire are so numerous and so valuable, as well from an archaeological as from an artistic point of view, that the Governor General in Council feels confident of meeting with ready co-operation from all the Provincial Governments, and desires that all possible assistance may be afforded to the officer to whom the organisation of the new department is confided.

3. The appointment of Captain Cole was notified in the *Gazette of India* of the 29th ultimo.

K

Extract from a letter from the Secretary to the Government of India, Home Department, to Local Governments and Administrations, dated the 12th August 1881.

2. The main object of Captain Cole's appointment is to give the Government of India and Local Governments the advantage of professional advice in questions concerning the restoration and conservation of ancient monuments throughout India. All schemes for such works should, therefore, be considered by Local Governments in consultation with Captain Cole, but he will not be directly concerned with the estimates for the work, which should be prepared by the officers of the Local Governments.

3. Should the estimated cost of any work be more than the Provincial Services can afford, the Local Government will be at liberty to apply for any additional sum required to the Government of India, by whom a certain sum will be set apart yearly for such purposes.

4. On the work being approved by the Government of India, or in the event of the Local Government being able to carry it out without assistance from that authority, it will rest with the Local Government to carry it out; but Captain Cole should be referred to from time to time as occasion may require during the execution of the work, and any suggestions of his should receive full consideration.

L

Letter from Captain H. H. Cole, R.E., Curator of Ancient Monuments in India, No. 512, dated Simla, the 10th November 1881, to the Secretary to the Government of India, Home Department.

I have the honour to submit the following recommendations for dealing to the best advantage with the various architectural illustrations in course of preparation in my Department.

2. Fourteen years ago, when the subject of Indian architecture was exciting a great and general interest at the Paris Exhibition of 1867,* I addressed a note on the collection of information about the architecture of India (dated Naini Tal, June 1867) to the Secretary of the Science and Art Department.

In paragraph 2 of that note I thus drew attention to the importance of reviving in this country a knowledge of its national art:—

"(2) Apart from the value of representing Indian architecture for study in England, there would be a good opportunity for representing at various museums in India a history of Native architecture. The education of natives whose modern art is daily becoming more and more corrupted, and all originality and identity being lost, is a matter worthy of serious consideration."

3. I again drew attention to this subject in my report for the year 1869-70 in which I submitted a brief narrative of my surveys in Kashmir, the North-Western Provinces, and of the casting operations at Sanchi in Central India. In the appendix of that report, quoted as follows, reference is made to the illustrations prepared in Kashmir and the neighbourhood of Agra, at Fatehpur Sikri, Bindra-bun and Dig, which were published by order of the Secretary of State at the India Office:—

"1. The study of Indian Art and Architecture is more important than would appear at first sight, and I append here a short note on the principal aims which I endeavour to keep in view in collecting illustrations.

"As bearing on our knowledge of India the study is important to those who wish to know who the people of this great country are, and what state they existed in before the Muhammadan invasion.

"The faith, state of civilisation, and prosperity of the natives who occupied any particular period or locality may be found engraved on the architecture of the country, and these stone records are all the more precious when it is considered that there are few written annals that can be trusted.

"2. To English architects the study offers a means of elucidating the true position of architecture in England, by widening the base of observation and enabling students to realise the definition of architecture as an 'art,' and not as a system of copying.

"3. Architecture in India is a living art, influencing not merely the forms and details of buildings, but giving birth also to nearly all those ornamental details which render so many Indian manufactures valuable as being at once ornamental and useful. The instruction, therefore, of native builders and artisans in the different styles of Indian architecture appears to be the chief remedy for preventing modern Indian buildings from lacking instinctive native merit free from efforts to copy European styles, and for rendering Indian ornamental manufactures of sufficient ornamental novelty to find a market not only in this country, but in Europe.

* The illustrated volumes published in 1866 under the auspices of the Committee of Architectural Antiquities of Western India, edited by Mr. T. C. Hope, C.E., together with the photographs of Indian buildings exhibited at Paris, brought the subject prominently forward.

"4. With special view, therefore, of making full use of such illustrations as are now being produced of Indian buildings, I venture to suggest that the photographs and drawings be freely circulated throughout India for study and reference.

"Schools of Art, Native Colleges, and Museums should, I think, exhibit them in series with vernacular notes. Municipal communities and civil authorities should possess copies of each series for reference, and I cannot but think that many appropriate forms could be selected out of which to design municipal and other buildings for native purposes.*"—(*Appendix, quoted from the Report, dated Camp Sanchi, February 1880.*)

4. The illustrations in course of elaboration in my office are of three kinds—

- (a) Rough sketches to illustrate preliminary reports.
- (b) Plans and drawings to illustrate recommendations for the preservation of buildings, &c.
- (c) Plans, drawings, details, photographs in illustration of Indian architecture and art.

5. The accompanying printed catalogue of the rough drawings† prepared by my draftsmen during the last year shows how much material has been collected. Many of these drawings have already been fared out for the Lahore and Delhi projects.

Besides these, Mr. Heath, Executive Engineer for the Conservation of Ancient Buildings in the North-Western Provinces, has prepared a considerable number of excellent drawings of buildings at Agra, Bindrabun, Mahoba, Hamirpur, Jaunpur, &c.

6. As I have already pointed out in my report of 10th May 1880, these illustrations to be of value *should be reproduced in the best possible style, and published in single plates for use in schools of art throughout India, and for sale to artisans.* The best firm in the world for architectural and art works is Morel & Co. of Paris. They have published some unequalled volumes on Oriental Art, and have abundant facilities for reproducing coloured drawings by chromolithography, by etching, and by engraving on steel and copper-plate. I have no hesitation in recommending that they be entrusted with the reproduction of the drawings above mentioned; but it would be essential to find out what are the points to observe, so that the engravers, &c., may have the least difficulty in reproducing from original plans and drawings.

When I have ascertained this, the drawings can be sent from India to Paris and published without further delay.

I would suggest that authority be given for me to incur a sum not exceeding Rs. 5,000 allotted out of this year's grant for conservation in getting a selection of the drawings reproduced.

* During my stay last year at Bindrabun, I saw in progress a Hindu house which was being built at the expense of a Lucknow banker. It is not too much to say that it was the most hideously hybrid structure I have ever seen. The capitals were Ionic, the polished marble pillars fluted, the details Hindu, Muhammadan, Gothic! And the doors and windows closed by green venetians.

† It is unnecessary to print the list here. It consists of 462 plans and details.

M

Catalogue of Works of Reference bearing on Indian and Oriental Architecture, Art, and Archæology.

(Under correction.)

Some six months ago I procured lists of the Indian and Oriental Art Books of Reference in the Art Library of the Kensington Museum. These lists I now give, keeping those on India separate from those bearing on Oriental Art. They contain a large number of most valuable volumes, many of which are out of print and difficult to get. Edwin Parsons, 45 Brompton Road, London, and other dealers in rare books will generally ferret out a copy, if it is going; but both Messrs. Thacker, Spink & Co., in Calcutta, and Thacker & Co., Bombay, have most of the modern works, and some of the reprints of the earlier ones.

Provincial Gazetteers of the Indian Empire can be obtained at the various Government presses. Hunter's Imperial Gazetteer of India is published by Trübner & Co.

Fergusson and Taylor's Architecture at Beejapore, and Architecture in Dharwar and Mysore, can be had of John Murray, London, but the photographs are out of print.

Fergusson and Burgess' Cave Temples of India is procurable through Thacker and Co., Bombay. General Cunningham's Archaeological Survey Reports are published by the Superintendent of Government Printing, Calcutta.

Dr. Burgess' Archaeological Reports of Western India are published by Allen and Co., London, but can be had at Thacker and Co., Bombay. Mr. Growse's Mathura Memoir is published at the Government Press, Allahabad.

Biddulph's Tribes of the Hindu Kûsh may be had from Thacker, Spink and Co., Rajendralala Mitra's Budu Gya, Bengal Secretariat Press, and my official and illustrated Reports on the Conservation of Indian Monuments are being published by the Indian Government.

A cheap edition of Rousselet's India and its Native Princes can be had of Thacker and Co., Bombay, price Rs. 9-8-0.

The following are interesting works:—

Ujfalvy, Boudon: De Paris à Samarkand. Hachette and Co., Paris, 1880.

Faria Souza: History of the Discovery and Conquest of India by the Portuguese; translated by Captain John Stevens, 1694.

Athanasius Nitikins: Travels in the Decan, 1470; translated by R. M. Major, Esq., Hakluyt Society.

Firdausi: Shahnamah, in Persian and French (to be had at Thacker's, Bombay).

Tod, James: Rajasthan (a reprint to be had at Thacker's, Bombay).

*Indian Guide Books, published by Messrs. Thacker & Co.,
Bombay, and by Messrs. Thacker, Spink & Co., Calcutta.*

	Rs.
Keeue's Guide to Delhi	2-12
————— Agra	2-4
————— Lucknow, Allahabad	2-12
Maclean's Guide to Bombay	5-0
Murray's Handbooks, Part 1, Madras	9-8
————— Part 2, Bombay... ..	9-8
Sherring's Guide to Benares	2-4
Tourist's Guide, Calcutta to Mooltan, Allahabad to Bombay	2-8
The Cashmir Handbook, by Ince	5-0
Bholanath Chunder's Travels of a Hindu	12-0
How we did the Lions of the North-West	1-0
The Delhi Handbook, by Stephen	0-8
The Tourist's Guide	2-0
The Archaeology of Delhi, by Carr Stephen	
History of Mandu, by a Bombay Subaltern, published in Bom- bay Education Society's Press for the Maharajah of Dhar.	

(I)

Catalogue of Books, &c., bearing on Indian Art.

- ALEXANDER (JAMES EDWARD).—Travels from India to England; com-
prehending a visit to the Burma Empire, and a journey through
Persia, Asia Minor, European Turkey, etc., in the years 1825-26.
Illustrated with maps and plates.—4to: London, 1827.
- ANNESLEY (GEORGE VISCOUNT VALENTIA).—Voyages and Travels to
India, Ceylon, the Red Sea, Abyssinia, and Egypt, in the years
1802-06. By George Viscount Valentia. Plates and maps.
—3 vols., 4to: London, 1809.
- ATKINSON (JAMES).—Sketches in Afghanistan, by James Atkinson, Esq.,
[lithographed plates by Louis and Charles Haghe].—Folio:
London, n. d., 1842.
- BELNOS (MRS. S. C.).—The Sundhya or the Daily Prayers of the
Brahmins. Illustrated in a Series of Original Drawings from
nature, demonstrating their attitudes and different signs and
figures performed by them during the Ceremonies of their
morning Devotions, and likewise their Poojas, etc. In 24
(coloured) plates, by Mrs. S. C. Belnos.—Imp. folio: London,
1851.

- BEHNES (MRS. S. C.).**—Twenty-four Plates, illustrative of Hindoo and European Manners in Bengal. Drawn on stone by A. Colin, from sketches by Mrs. Behnes (text in English and French).—*Folio: London, n. d.*
- BIRD (JAMES).**—Historical Researches on the Origin and Principles of the Buddha and Jaina Religions, illustrated with descriptive account of the Sculptures in the Caves of Western India, with Translations of the Inscriptions from those of Kanari, Karli, Ajanta, Ellora, Nasik, &c., which indicate their connexion with the Coins and Topes of the Punjab and Afghanistan. 53 plates.—*Folio: Bombay, 1847.*
- BIRDWOOD (GEORGE C. M., C.S.I., M. D.), now Sir G.**—The Industrial Arts of India. With map and woodcuts. Published for the Committee of Council on Education.—2 vols., large *cr.* 8vo: *London, 1880.*
- BLAGDON (FRANCIS WILLIAM).**—A Brief History of Ancient and Modern India, from the Earliest Periods of Antiquity to the termination of the late Mahratta War.—*Oct. folio: London, 1805.*
- BREEKS (JAMES WILKINSON).**—An Account of the Primitive Tribes and Monuments of the Nilgiris. By the late J. W. Brecks; edited by his widow.—4to: *London, 1873.*
- BROUGHTON (THOMAS DUER).**—The Costume, Character, Manners, Domestic Habits, and Religious Ceremonies of the Mahrattas. With 10 coloured engravings, from drawings by a native Artist.—4to: *London, 1813.*
- BUCHANAN (DR. FRANCIS).**—A Journey from Madras through the countries of Mysore, Canara, and Malabar, performed under the orders of the Most Noble the Marquis of Wellesley, Governor General of India, for the express purpose of investigating the state of Agriculture, Arts, and Commerce; the Religion, Manners, and Customs; the History, Natural and Civil, and Antiquities, in the Dominions of the Raja of Mysore, and the countries acquired by the Hon. East India Company, in the late and former wars, from Tippoo Sultan. By Francis Buchanan, M.D. Illustrated by a map and numerous other engravings.—3 vols., 4to: *London, 1807.*
- BURGESS (JAMES).**—Archæological Survey of Western India. Vol. I., Report on the First Season's Operations in the Belgām and Kaladgi Districts, January to May, 1874; Vol. II., Report on the Antiquities of Kathiawad and Kach, 1874-75; Vol. III., Report on the Antiquities in the Bidar and Aurangabad Districts, in the territories of His Highness the Nizam of Hyderabad, 1875-76. 3 vols., with photograph and lithograph plates.—*Royal 4to: London, 1874-78.*
- BURMESE WAR, THE.**—(Eighteen coloured views taken at and near Rangoon, by Lieutenant Joseph Moore, 89th Regiment; and six coloured engravings illustrative of the combined operations of the Forces in the Burman Empire, 1824 and 1825. Painted by T. Stothard, R. A., from original sketches by Captain Marryat, R. N.).—*Oct. folio: London, 1826.*

- BURNES (LIEUTENANT ALEXANDER).—*Travels in Bokhara; being the account of a journey from India to Cabool, Tartary, and Persia; also the narrative of a voyage on the Indus from the sea to Lahore, with presents from the King of Great Britain, performed under the orders of the Supreme Government of India, in the years 1831, 1832, and 1833.*—3 vols., roy. 8vo: London, 1834.
- CALDECOTT (JOHN).—*Description of an Observatory established at Travandrum by His Highness the Raja of Travancore.*—4to: Madras, 1837; London, 1839.
- CLARK (MRS. H.).—*Summer Scenes in Kashmeer. Drawn on stone by J. Needham, from sketches by Mrs. H. Clark (12 lithographs).*—Imp. folio: London, 1858.
- COLE (HENRY HARDY).—*Illustrations of Ancient Buildings in Kashmir prepared under the authority of the Secretary of State for India in Council, from photographs, plans, and drawings taken by order of the Government of India. By Henry Hardy Cole, Lieutenant, R.E., etc.*—Folio: London, 1870.
- COLE (HENRY HARDY).—*The Architecture of Ancient Delhi, especially the Buildings around the Kutub Minar, by Henry Hardy Cole, Lieutenant, R.E., etc.*—Folio: London, 1872.
- COLE (HENRY HARDY).—*Illustrations of Buildings near Muttus and Agra, showing the mixed Hindu-Mahomedan style of Upper India, prepared at the India Museum under the authority of the Secretary of State in Council, from photographs, plans and drawings taken by order of the Government of India by Henry Hardy Cole, Lieutenant, R. E.*—Folio: London, 1873.
- COLE (HENRY HARDY).—*Catalogue of the Objects of Indian Art exhibited in the South Kensington Museum, compiled for the Science and Art Department by H. H. Cole., Lieutenant, R.E. Illustrated by woodcuts and a map of India showing the localities of various art industries.*—8vo: London, 1874.
- CORDIER (JAMES).—*A Description of Ceylon, containing an Account of the Country, Inhabitants, and Natural Productions; with narratives of a tour round the island in 1800, the Campaign in Candy in 1803, and a journey to Ramistorum in 1804. Illustrated by 25 engravings from original drawings.*—2 vols., 4to: London, 1807.
- COSTUMES.—A collection of fifty-nine original coloured drawings of Indian costumes.—4to.
- COSTUMES, Indian.—Fifty-three original coloured drawings of Indian costumes.—8vo.
- CUNNINGHAM (ALEXANDER).—*An Essay on the Arian Order of Architecture as exhibited in the Temples of Kashmir, by Alexander Cunningham. [Plates.]*—8vo: Calcutta, 1848.
- CUNNINGHAM (ALEXANDER).—*The Bhilsa Topes; or Buddhist Monuments of Central India, comprising a brief historical sketch of the rise, progress, and decline of Buddhism, with an account of the opening and examination of the various groups of Topes around Bhilsa. By Brevet-Major Alexander Cunningham. Illustrated with thirty-three plates.*—8vo: 1854.

- CUNNINGHAM (ALEXANDER).—The Ancient Geography of India. I.—The Buddhist Period, including the campaigns of Alexander and the travels of Hwen Tsang. With 13 maps.—*Royal Soc: London, 1871.*
- CUNNINGHAM (ALEXANDER).—The Stupa of Bhachut or Buddhist Monument ornamented with numerous sculptures illustrative of Buddhist legend and history in the third century B. C. Published by order of the Secretary of State for India. With 57 plates.—*4to: London, W. H. Allen & Co., &c., 1879.*
- DANIELL (T. and W.).—Antiquities and Views in India, from the drawings of Thomas Daniell. 143 engravings (one wanting).—*Large folio: London, 1799.*
- DANIELL (THOMAS and WILLIAM).—A Picturesque Voyage to India, by the way of China, by Thomas Daniell, R. A. and William Daniell, A.R.A.—*Obt. 4to: London, 1810.*
- DANIELL (WILLIAM). Eastern Legendary Tales and Oriental Romances; being a representation of oriental manners and habits, exhibiting a true picture of eastern society. Embellished with engravings on steel, from drawings by the late W. Daniell, R. A.—*2 vols., 8vo: n. d.*
- DIXON (C. J.).—Sketch of Mairwarra; giving a brief account of the origin and habits of the Mairs, their subjugation by a British Force; their civilisation, and conversion into an industrious peasantry; with descriptions of various works of irrigation in Mairwarra and Ajmeer, constructed to facilitate the operations of agriculture, and guard the districts against drought and famine. Illustrated with maps, plans, and views, by Lieutenant-Colonel C. J. Dixon.—*4to: London, 1850.*
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List of some Historical British Monuments and Memorials worthy of preservation on account of their public interest, dated 13th July 1882.

(Under correction.)

Bengal.

1. The Ochterlony Monument on the Calcutta maidan; built in 1825 in honour of Sir David Ochterlony. The column is of plastered brick.
2. Pedestrian statue of Lord William Cavendish Bentinck, Governor General; erected in 1835 in front of the Calcutta Town Hall; bronze.
3. Pedestrian statue of George, Earl of Auckland, Governor General; erected in 1848; inside the Eden Gardens, Calcutta; bronze.
4. Pedestrian statue of Sir William Peel, Calcutta; white marble.
5. Equestrian statue of Henry, Viscount Hardinge, on the Calcutta maidan; bronze.
6. Equestrian statue of Sir James Outram (by Foley, 1874), Calcutta; bronze.
7. Statue of the Marquess of Hastings (in the Dalhousie Institute) Calcutta.
8. Statue of Lord Lawrence, Calcutta.
9. Statue of Lord Mayo, Calcutta.
10. Lady Canning's tomb in Barrackpore Park.
11. Cenotaph in Barrackpore Park, erected by the Earl Minto containing the following mural tablets:—to the memory of officers who fell at the conquest of Java, 1810-12; also to the memory of officers who fell at the conquest of the Isle of France, 1810; and to the memory of the officers who fell at Maharajpore, 1843.
12. Cenotaph close to the Judge's kutcherry at Hankipore, erected in memory of Major Knox, who in 1760 relieved Patna when besieged by the Emperor Shah Ahm.
13. Tall stone shaft in Patna City, erected in memory of 48 servants of the East India Company and 100 European soldiers massacred by Mir Kassim Ali, Subadar of Bengal, when the British were marching to the rescue of their countrymen in Patna in 1763. Among the victims were Mr. Ellis (Resident of Patna) and Messrs. Hay and Lushington (Members of Council).
- 13a. Two monuments at Bhagalpur to the memory of Mr. Augustus Cleveland, Collector of Bhagalpur; one of brick, erected by the district landholders, and the second of stone, sent out by the Court of Directors from England.
14. A small cross in the disused burial ground enclosed in the Bhagalpur race course, erected to the memory of officers and men of Her Majesty's 3rd Buffs, interred in 1828.

15. Monument at Aligarh to the memory of officers and men who fell at the taking of Aligarh in 1803. North-Western Provinces.
16. Tomb at Aligarh of Major Robert Nairn, 6th Bengal Cavalry, who fell at the siege of Kutchowra in 1803.
17. Monument at Aligarh to the memory of officers and men who fell during the Mutiny, 1857.
18. Two memorial pillars erected to the memory of the officers who fell at the storming of the Kalinga Fort in 1814, Dehra Dun.
19. Monument at Fatehgunj near Bareilly to the memory of the officers and men who fell near Fatehganj against the Rohillas in 1794.
20. Tomb of the late Mr. Thomason, Lieutenant-Governor, North-Western Provinces, in the Churchyard of Christ Church, Bareilly.
21. Tomb of Lieutenant-Governor the Hon'ble John Russell Colvin at the Palace of Agra.
22. At Govenkhun a massive monolith bearing an inscription setting forth that Colonel Seymour, C. B., will punish any soldier who shoots game in the neighbourhood.
23. Monument at Aligarh to the memory of Ensign Marsh and others killed on the Agra and Aligarh road in 1857.
24. Tombs at Shewalaghat, Benares, of three British officers who were killed in the disturbance of Rajah Cheyt Singh.
25. Memorial cross at Fatehgarh in memory of those who fell during the Mutiny, 1857.
26. Tomb in Cawnpore Memorial Church compound erected to the memory of Major Vibart and 70 officers and men who escaped from the massacre at Cawnpore in June 1857 and were captured and murdered at Sheorajpur.
27. Tomb near the Cawnpore Church erected by the Memorial Church Committee over the remains of those that were first killed in the entrenchment in June 1857.
28. Well in the Memorial Church compound covered with a stone and inscription.
29. Large stone cross at the barracks, Cawnpore, erected over the well in which those that lost their lives in the entrenchment were buried in 1857.
30. Statue (by Marochetti) and enclosure over the well in the Memorial Gardens, Cawnpore.
31. Memorial at Azamgarh erected to the memory of the officers and men who were killed at the battle of Azamgarh.
32. Mausoleum of Lord Cornwallis at Ghazipur by Flaxman.
33. Monuments at Jhansi in memory of those killed in the Mutiny, 1857.
34. The space in front of the Tarawali Kothi, where two parties of Europeans were murdered in 1857; a memorial has been Oudh. Lucknow.

Cash
Luncheon

put up to commemorate these massacres almost on the spot where they occurred.

35. On left of "Gossainganj" Road, about $\frac{1}{2}$ mile from "Dilkoo-sha," and on this side of bridge, over "Pangri" Nullah—Lieutenant Percy C. Smith, 97th Regiment.
36. About fifty yards on left flank of "Dilkoo-sha" in an enclosure, Major the Hon'ble Barrington R. Pollew and Ensign L. E. Cooper, 2nd Battalion, Rifle Brigade.
37. In rear of the General's house, Captain Charles William McDonald, 93rd Highlanders; Lieutenant Lowick Emilus Cooper, 2nd Battalion, Rifle Brigade; Lieutenant Charles Warden Sergrison, 93rd Highlanders, and Charles Evans, 93rd Band.
38. In the "Belatibagh," Captain H. Hutchinson, 9th Royal Lancers, Sergeant S. Newman, 9th Royal Lancers, and Mr. Henry B. Garvey, Acting Mate, Her Majesty's S.S. *Shan-noon*.
39. In rear of the right bank of "La Martiniere"—Captain W. S. B. Hodson of Hodson's Horse; Captain L. D'Acosta, 56th Native Infantry.
40. Under a tree on the left of the road going from "La Martiniere" to "Wingfield Park Bridge"—Lieutenant Augustus Otway Mayne, Bengal Artillery.
41. About fifty yards on the left of "Secundralagh"—Lieutenant Francis Dobbs, and 5 Privates of 1st Madras Fusiliers.
42. Off the road between "Mushidzadi's Tomb" and the Kaiserbagh—Captain T. Clarke, R.E., Lieutenant E. P. Brownlow, R.E., Corporal E. Morgan, Lance Corporal J. Davies, and 12 Sappers.
43. At "Secundralagh" Bridge on the left bank of "Gumti"—Lieutenant W. R. Mooroom, 52nd Light Infantry, Deputy Assistant Quarter Master General, 1st Division.
44. About $2\frac{1}{4}$ miles on and close to the left of "Fyzabad" road—Captain W. F. Thynne, 2nd Battalion, Rifle Brigade.
45. About 150 yards off the right of the "Fyzabad" road, at 50 yards beyond the bridge over the "Gokral" Nullah—Charles Sanford, late Captain of the 3rd Bengal Light Cavalry.
46. Old cantonment cemetery, 3 miles on the "Sitapúr" road to the right—Lieutenant F. G. MacDonald, Adjutant, 2nd Pun-jab Cavalry; Lieutenant H. G. Richards, 3rd Battalion, Rifle Brigade, and Lieutenant Robert Daly Synges, 90th Light Infantry.
47. About 50 yards to the right of the "Sitapúr" road at the 4th milestone, the 46th Regiment, Cholera Graveyard—Private W. Aston, 46th Regiment.
48. At the "Mūsabagh"—Captain T. Wale, 1st Sikh Irregular Cavalry.

49. About $\frac{1}{2}$ mile off the "Mallabad" road between it and "Mó-sabagh"—Major John Griffiths Price, 2nd Dragoon Guards (Queen's Bays). Oudh.
Lucknow.
50. The 97th Regiment Graveyard on the river road, 1 mile from the Fort, Ramiki Darwaza—Sergeant W. Smith and Sergeant G. Smith, 97th Regiment; Assistant Surgeon W. Dumbreck 97th Regiment.
51. Steeple monument on the top of "Hazratganj" near "Kaiserbagh"—Sir Mountstuart Jackson, Bart., Captain Patrick Orr, Lieutenant G. J. H. Burns, 1st Bombay European Fusiliers, Sergeant-Major Morton; on other side G. P. Carew, Esq., Mr. Greene, Miss Jackson, and others, victims of 1857.
52. In the "Alambagh"—Major T. Perrin, Lieutenant N. G. J. J. Nunn, and M. Preston, 90th Light Infantry, Lieutenant Dundas W. Gordon, Bengal Artillery, Henry Ayton, 84th Regiment, Major-General Sir H. Havelock.
53. Tomb about $3\frac{1}{2}$ miles off the left side of the "Sitapur" road between the 7th and 8th milestones.
54. Old "Murriacn" Cemetery and Roman Catholic Cemetery in rear of the "Passant" (Revenue or Customs) "Kaiserbagh."
55. Two tomb-looking enclosures—one close to the right side of the "Seetapore road," about the 8th milestone, nearly opposite the Traveller's Bungalow; the other on the Artillery side of the road, running between their lines and the Lancers.
56. Lawrence's tomb—Residency.
57. Cross to those who fell in the defence—Residency.
58. Memorial to the faithful sepoys of the Bailey Guard, outside the Bailey Guard.
59. The "Sher Darwaza," where Neill fell.
60. Tomb of Mr. Ravenscroft, murdered at Bhinga, Oudh, 1823. Oudh.
61. Mackeson's Obelisk—Peshawar. Panjab.
62. Bilaspore monument to Captain Showers, four or five hundred yards to the East of Ratten Ghar, 1-19th Bengal Native Infantry, storming the Malown Heights, 15th April 1815.
63. Also to Lieutenant Lawtis, R.E., rude tomb of stones; a monument was erected to him in the Cathedral Church of Calcutta.
64. Lieutenant Thackery, 26th Native Infantry, killed at the siege of Jeytnak; his tomb on the bank of a tank at Nalun. This monument is a lofty pyramid on a pedestal without any inscription; there are three other graves.
65. In front of the Delhi Church is a massive marble cross, sacred to the memory of those who were massacred in May 1857.
66. The Delhi magazine rendered famous by the intrepid Willoughby.
67. John Nicholson's grave in the cemetery, Delhi, facing the Kashmir Gate.

- Punjab.**
68. Flag-Staff Tower, Delhi.
 69. The monument on the Ridge, Delhi.
 70. Monument and fountain in memory of General John Nicholson, who fell at Delhi, 1857, at Margulla, between Rawalpindi and Attock.
 71. Memorial monument of the siege of Delhi, 1857; Delhi.
 72. Battle-field monument at Mudki, Ferozpur.
 73. Battle-field monument at Ferozeshah.
 74. Battle-field monument at Sohraon.
 75. Tomb of Sir Henry Durand at Dera Ismail Khan.
 76. Tomb of Lord Elgin at Dhurmsalla.
 77. Monument in memory of those killed at Hissar in 1857.
 78. Memorial at Montgomery of Leopold Oliver Fitzhardinge Berkeley, Extra Assistant Commissioner, killed in 1857.
 79. Monument over the bodies of officers killed at Chattrian, Sirsa District, 1857.
 80. Battle-field obelisk at Gujrat.
 81. Battle-field obelisk at Chilianwalla, and graves of men who fell in 1849.
 82. Battle-field obelisk at Aliwal, Ludhiana.
 83. Monument erected in memory of Mr. Vans Agnew and Lieutenant William Anderson, at Multan, in the Fort.
- Mysore.**
84. Equestrian Statue of Lieutenant General Sir Mark Cubbon, Commissioner of Mysore and Coorg (by Marochetti) in front of the Mysore Government offices, Bangalore, bronze.
 85. Cenotaph of the officers who fell at the siege of Bangalore, 1792.
- Bombay.**
86. Statue of Sir Charles Forbes.
 87. Statue of Hon'ble Mountstuart Elphinstone.
 88. Statue of Sir John Malcolm.
 89. Statue of John, Lord Elphinstone.
 90. Sitting statue of Mr. Stephen Babington.
 91. Statue of Sir Bartle Frere.
 92. Sitting statue of Mr. Charles Norris.
 93. Sitting statue of Sir Jamsetjee Jejeebhoy.
 94. Statue of Lord Cornwallis.
 95. Sitting statue of the Marquis of Wellesley.
 96. Sitting statue of Her Majesty Queen Victoria on the Esplanade, Bombay.
 97. Statue of the Prince of Wales.
 98. Statue of Prince Albert.
 99. Statue of the Hon'ble Jugganath Sunkersett, in the Fort.
 100. Statue of Sir Jamsetjee Jejeebhoy, Bart., Jamsetjee Jejeebhoy Hospital, Byculla.
 101. Memorial marble tablets of the officers and men who fell in the Afghanistan and Sind campaigns, on the walls of the apse and chancel of St. John's Church at Colaba.

In the Town
Hall, Bombay.

Garden enclosure of the El-
phinstone Circle, Bombay.

102. Old Dutch tombs at Ahmedabad. Bombay.
103. Monument in the wall of the town of Ahmadnuggur, naming those who fell at the storming of the city in 1803.
104. Monument at Koregaum, near Poona, to the 2nd Bombay Grenadiers.
105. Grave in Kanara of Lord St. Maur, son of the Duke of Somerset, killed in 1865 by a bear at Kirwatty, near Yellapur.
106. Grave in Kanara of Lieutenant Carpendale, who died at Yellapur while surveying the Arhyle Ghant Road.
107. Memorial cross at Poona to Lord Frederick FitzClarence.
- 107a. Monument at Kawulkad, Kanara, in memory of Lieutenant John Edgar Leslie, Madras Native Infantry, who died in service on 20th March 1845.
- 107b. Tomb at Murkwad, Kanara, in memory of Lieutenant Mortlock.
108. Monuments at Aden over the officers and men who fell at the capture of Aden in 1839.
109. Tomb of John Thackeray, Collector and Political Agent, killed at Kittur in 1824, during the insurrection, at Kittur in Dharwar.
110. Wooden cross with metal tablet bearing Latin inscription in the "Mula's Ward" of Surat—marks site of ancient Capuchin Chapel.
111. Oxenden Mausoleum, Surat.
112. Tombs at Surat of General Angier (supposed) Bernard Wyche, F. Briton, H. Gary, and B. Harris; former Presidents and merchants of Surat.
113. Tomb of Van Rensselaer, Dutch President of Surat, and other Dutch tombs of same epoch, near the preceding.
114. Tom Coryat's tomb—old European burial ground, Swali, near Surat.
115. Vaux's tomb on right bank of Tapti, not far from its mouth—near Surat.
116. Tomb of Brigadier David Wedderburn, killed at siege of Broach, 1772, near North-Western bastion of Fort Broach.
117. Tomb of Captain William Sempil, killed at Broach, 1803, near village of Pejalpūr, Broach.
118. Tomb of M. François Montreaux, a Portuguese officer, who seems to have taken part in siege of Broach, 1803, near the preceding.
119. Dutch tombs—about one mile west of Pejalpūr, Broach.
120. Tomb of Edward Cooke, with peculiar inscription, 1743—Tatta in Sind. Sind.
121. Old European burial ground on Bandar Road, Karachi. •
122. Napier Obelisk (1853) in memory of Sir Charles Napier—Napier Mole Road—Karachi.

- Sind.** 123. Monument bearing names of officers and men who fell on the battle-field of Miani, Haideralabad, Sind.
124. Monument erected by Sir C. Napier to memory of officers and men, 22nd Regiment, who fell in Sind campaign—in Government House grounds, Karachi.
- Rajputana.** 125. Bust and inscription at Ajmir of the late Colonel Sutherland.
- Central Provinces.** 126. Monument and tomb in the Sitabuldi Hill Fort to the memory of officers killed at the battle of Sitabuldi in 1817.
- British Burma.** 127. Graves at the Shive-Dagun Pagoda, Rangoon, of officers and men killed at the storming of the Pagoda in 1852.
128. Graves at the Bötatong Pagoda, Rangoon, of officers and men who fell or died in the second Burmese War, 1852.
- Assam.** 129. Memorial at Cherra Panji to the memory of David Scott, B.C.S., Agent to the Governor General, who died 20th August 1831.
- Madras.** 130. Equestrian statue of General Neill, 1st Madras Fusiliers—Mount Road; bronze.
131. Equestrian statue of Sir Thomas Munro, once Governor of Madras, middle of island; bronze.
132. On the parade ground facing the Council House, stone canopy covering a large pedestrian marble statue of the Marquis of Cornwallis on a marble pedestal, decorated with groups of figures in alto-relievo, representing the surrender of the sons and suite of Tipu Sultan.
133. White marble statue of Sir Thomas Munro—Fort Church.
134. Cenotaph to the Marquis of Cornwallis, enclosed by an iron railing cast from the cannon taken at the siege of Seringapatam, 1799, by the troops under his command—Mount Road.
135. Cenotaph to Colonel Dalrymple—Parade ground, St. Thomas' Mount.
136. Obelisk in memory of General Sydenham—St. Thomas' Mount.
137. Granite column to Colonel Noble, C.B., erected by the men of the Horse Artillery—St. Thomas' Mount.
138. A half-length marble bust (by Chantrey) to Colonel Noble, C.B., placed by the officers, Royal Horse Artillery, in the Church, St. Thomas' Mount.
139. Madras Memorial Hall—erected by public subscription in memory of the Madras Presidency not joining in the Sepoy Mutiny of 1857.
140. "Lal Bagh" Seringapatam, a mausoleum built by Tipu Sultan for his father, and in which he also was buried. The folding-doors, inlaid with ivory, were the gift of Lord Dalhousie, and the mausoleum is supported at Government expense.

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Report on Monuments in Madras, together with a Note on Works undertaken.

Seven Pagodas, Vellore, Trichinopoly, Madura, Tanjore, Kombakonum, Chhillambram, Congeveram, and Bijanagar, dated 23rd June 1881.

Mahavallipur, or the Seven Pagodas.

The rock-cut remains and ancient structural buildings at Mahavallipur are about 30 miles south of the city of Madras, and may be reached by the East Coast Canal, which runs parallel to the sea-shore. My visit was paid in February 1881, when I carefully inspected these very remarkable and valuable monuments.

2. Various accounts will be found in "Descriptive and Historical Papers relating to the Seven Pagodas on the Coromandel Coast," by W. Chambers (1772), J. Goldingham (1798), B. G. Babington, F.R.S. (1830), the Revd. G. W. Mahon (1841), Lieutenant J. Braddock (1840), the Revd. W. Taylor (1840), Sir Walter Elliot (1844), and C. Gubbins (1853), edited by Captain M. Carr, printed for the Madras Government, 1869.

3. They are also referred to by Mr. James Fergusson in his "History of Indian and Eastern Architecture," 1876, pages 184, 175, 326, 330, 274, 333: and again by the same author in Fergusson and Burgess' "Cave Temples of India, 1880," Chapters V, VI, VII.

4. Besides these, drawings, plans and sections have been made under the direction of Colonel Sankey, C.B., R.E., Chief Engineer, Madras; and Mr. R. Chisholm, Superintendent of the Government School of Art in Madras, has made a complete set of illustrations of the Rathas.

5. Photographs have been taken by Dr. A. Hunter and Captain Lyon for the Madras Government; also by Mr. Nicholas of Madras.

NOTE.—As so much good can be done by very simple remedies to preserve the great majority of the wonderful monuments that I visited in Madras between the 29th February and the 7th March, I have thought it better to submit a preliminary report. The sketches (which are taken from photographs), rough as they are, give some idea of the state and importance of the buildings. Later, I hope that detailed and accurate plans of the more important examples will be procured.

There are, generally, three classes of monumental buildings—

- (1) Those in the charge of Government.
- (2) Those the property of Natives or in their use for worship.
- (3) Those in Native States.

As regards the provision of funds, there are—

- (1) Government grants.
- (2) Public subscriptions.
- (3) Voluntary expenditure by private individuals or out of endowments.
- (4) Expenditure by Native rulers in their own States.

Natives of all creeds voluntarily contribute large amounts for repairs to religious buildings, &c., and the Trustees could not but some given for the purpose are properly laid out. Religious buildings with State endowments are national property, and as such should not, I submit, be allowed to fall into disrepair or be deteriorated.

6. Mr. Adam, the late Governor of Madras, took considerable interest in these monuments, and early in February last spent some days in their careful examination.

Mr. Adam's interest.

7. Mr. Burnell and Mr. Burgess agree in adopting the date 650 to 700 A.D.

Date,

for the excavation of the rock temples and bas-reliefs; and the inference which Mr. Fergusson

derives from this conclusion is that the rock-cut edifices at Mahavallipur are the earliest known examples of the Dravidian style of architecture of Southern India, and their value becomes at once enormously raised.

The granite remains consist of—

- (1) The nine Rathas, or isolated temples cut out of the single boulder.
- (2) The thirteen caves excavated out of the rocks at Mahavallipur and two more at Saluvankuppam.
- (3) The two great bas-reliefs of Arjuna's penance.

Besides these, there are several structural temples, the most important of which is the so-called "Shore Temple," which has long served as a landmark for shipping.

8. The accompanying sketch maps are taken from the revenue surveys of Mahavallipur and Saluvankuppam in Colonel Sankey's volume of plans and sections; and I have in the following notes adopted the numbers used in that map to indicate the monuments:—

9. No. 2, *Pidariamman Ratha* (unfinished).—A monolith, 23 feet high, with its upper half carved into a temple.

10. No. 3, *Pidariamman Ratha*.—This is a similar monolith, and is 25 feet high.

11. No. 4, *Valaigan Kuttai Ratha*.—This is a similar monolith, and is 23 feet high (see sketch).

12. Nos. 2, 3 and 4 should be in custody to prevent conversion into a quarry.

13. No. 6, the "*Alaina*" or "*Shore*" Temple (see sketch).—This is a most remarkable monument, probably dating from the 8th or 9th century; and, if not the most early, is one of the best examples of structural primitive Dravidian architecture. Being on the edge of the sea—washed, in fact, by the waves—it has become much decayed by the action of the wind and salt water. Part of the building lies ruined in the surf, and a solitary pillar is left erect in the midst of fallen blocks of stone. My impression is that there existed a colonnade or porch in front, and that this column is part of the structure.

14. Colonel Sankey's volume has plans and sections of the temple; but it would, I think, be well to complete the survey for elevations and details, in order to show the position of the surrounding walls, parts of which are still traceable. Dedicated to both Siva and Vishnu, the main chamber of the building contains a broken lingam, and the vestibule has a reclining figure of Vishnu, 10 feet long. The stone masonry of the *pagoda* is much broken and displaced, and should be rendered secure and replaced.

The interior chambers should be cleaned out and the sand removed, so as to completely reveal the plan of the exterior.

Sand should also be removed to lay bare the outline of the walls which form the outermost enclosure.

The removal of roots of creepers from the roof is important.

15. *No. 7, the Mahakausa Rock and Chamber.*—Situated north of the Shore Temple and close to the sea. It should be watched to prevent wilful damage.

16. *Nos. 12, 13 and 14, the Vishnu and Embesman Temples.*—Lie between the larger granite hill and the village. Being in use for Hindu worship, they are cared for to a certain extent, and more but Hindus are allowed inside the sanctuaries. Colonel Sankey's volume contains plans and sections of the buildings, showing the interiors of the shrines and the subjects portrayed in the bas-reliefs, and so supplies a want to which Fergusson draws attention (see page 158, Fergusson and Burgess' "Cave Temples of India").

17. *No. 15, Krishna Mandapam.*—This is partly a rock excavation and partly structural. The bas-relief, representing Krishna with a group of gopis (herdswomen) and cows, is carved on the solid rock, and measures 10 feet long by 10 feet high. The roof over this rock sculpture is built of masonry, and gives access to a stream of rain water, thus destroying and wearing away the carvings, and covering them with lichen. *The roof should be made water-tight, and the interior, as well as the carvings, thoroughly cleaned. The front row of columns should be filled in with a frame of galvanized wire netting, and the centre filled with a wicket gate, under lock and key.*

18. *No. 16, an unfinished rock excavation.*—Interesting from an architectural rather than an archaeological point of view. One of the front columns is broken and the front half fallen away. *The second row of columns has been bricked up for dwelling purposes, and should be cleared. The cave should be cleared out and kept in custody; and in order to prevent natives from damaging the interior by lighting their cooking fires, the front should be ruled in with a stone railing or wall.*

19. *No. 17, the Great Bas-relief of Arjuna's Penance.*—One of the most remarkable objects of interest. It is carved on two masses of granite rock, measuring about 90 feet long by 30 feet average height. Between the two rocks was the serpent statue of the Naga Raja.* The head of the Raja, overshadowed by a seven-headed serpent, fell to the ground. *This should now be obtained and securely replaced and made fast, not only to the body of the serpent, which is still in position, but should be supported by iron bars let into the two masses of rock. The base of the bas-relief requires clearing of sand.*

20. *No. 21.—A cave with three niches, the centre one containing a figure of Mahadeva, and the flanks having figures of Vishnu.* In front of the cave, 24 feet off, is a circular cistern, No. 20, cut out of a solid stone and called "The Gopis' Churn." *The front of the cave should be fenced to prevent damage.*

21. *No. 24, Gaura Temple (see sketch).*—This elegant Rathu measures 20 feet 3 inches by 11 feet 4 inches, and is cut out of the solid rock. It is in fair preservation, but should have the three front openings between the pillars filled with frames of wire netting to prevent the inner chamber being damaged by use as a dwelling or cook house. Its form and outline are found frequently in southern temples for gateways, but seldom for actual sanctuaries, as in this instance.

* It was evident that the head of the Naga Raja had fallen from the accident of its position, the artists having placed it in the centre, where it could have a shadow behind it, but where it had no support. I consequently wrote to my friend Dr. Hunter to try and find it. With the assistance of the then Madras Government he recovered the head and found it lying where it fell. I afterwards made application to the Government to have it replaced, which could easily be done, and so give meaning to the whole bas-relief. This I understood from my friend Mr. Campbell Johnson, who took out my application, was also mentioned and ordered to be carried out; but from photographs recently received it appears now only that this has not been done, but that the tail has been removed from where it originally stood after its recovery."—(Fergusson.)

22. *No. 25, Fishnava Cave* (see sketch).—The interior of the cave measures 20 feet 6 inches by 8 feet 6 inches, and has, amongst other subjects, bas-reliefs of the Bear Avatar and one of Sri Lakshmi, seated on a lotus flower with elephants pouring water over her. *The openings between the columns should be filled in with frames of wire netting, and the front cleared of debris.* On the occasion of my visit steam-blasting had been going on dangerously near, and one huge boulder had been precipitated close to the sculptured cave.

Quarrying should be absolutely forbidden.

23. *No. 27, the Rayala Gopuram.*—This is on the hill overlooking the village temple. It is an unfinished porch of brick and stone, and is surrounded by a good deal of scrub jungle, *which might with advantage be outrooted.*

24. *No. 28, stone couch with recumbent lion as a pillow.*

25. *No. 32, the Mahishasurardini Mandapam.*—The sculptures in the cave, which measure 34 feet by 15 feet, are spirited. At the south side is a bas-relief of Narayana or Vishnu resting on the head of the snake Sesha.

At the north side is a representation of Mahishasura and Durga in strife.

In the back are three cells, the central one having a lingam. *One of the four front pillars has completely fallen, and might for appearance sake be replaced, but the rock above is so massive that there is no actual need of support. The sculptures should be cleared, and the front openings closed with frames of wire netting.*

26. *No. 34, the Iswara Temple.*—A structural temple, 56 feet above No. 32, on the summit of the rock. It rests on a foundation of brick-masonry, but the superstructure is of stone. The roof has fallen in, and *the debris ought to be cleared away from the interior. Creepers should be outrooted from the masonry, and access made easier than at present, as visitors have to scramble over slippery rock to reach the building.*

27. *No. 35, Varahavami (Vishnu) Temple.*—Colonel Sankay's drawings illustrate the bas-reliefs of the interior, and confirm the description given by Fergusson (page 147, "Cave Temples of India"). This cave is inaccessible to any one but Hindus.

28. *No. 37, Draupadi's Rathā* (see sketch).—This monolithic temple measures 11 feet square and 17 feet above the present sand-level. The finial which surmounted the roof has fallen, and may probably be found in the sand, *which should be removed so as to lay bare the plinth down to its base.*

29. *No. 39,* Arjuna's Rathā.*—A monolithic temple measuring 11 feet 10 inches each way, and has a small porch 10 feet 6 inches by 3 feet 9 inches. Its total height above the floor-level is 21 feet 6 inches. *It should be cleared of the sand which now conceals the plinth.*

30. *No. 41 A, Natula and Shadava's Rath* (see sketch).—Is a monolithic building with an apsidal termination. The whole, including the porch, measures 28 feet long by 11 feet 4 inches, and the height above the ground 20 feet.

* (Nos. 39 and 41).—Speaking of these Rathas, Mr. Fergusson says:—"Although these two last-mentioned Rathas are sufficiently interesting as examples of the patient labour which the Indians have at all times been prepared to spend on their religious edifices, their true value, in so far as the history of Indian architecture is concerned, lies in the fact that they are the only known specimens of a form of Buddhist architecture which prevailed in the north of India for probably 1,000 years before they were constructed, and they are the lacunulae of thousands of Hindu temples which were erected in the south of India during the 1,000 years that have elapsed since they were undertaken."

"The great interest of this Ratha," says Mr. Fergusson, "lies in the fact that it represents, on a small scale, the exterior of one of those Chaitya caves which form so important a feature in all the western groups, but all of which are interiors only, and not one so completely excavated as to enable us to judge of what the external appearance may have been of the constructed chaityas for which they were copied." *This building should be cleared of sand.*

31. No. 42, *Bhima's Ratha* (see sketch).—This is the largest in plan of the group of monolithic temples at Mahavallipur. It measures 48 feet 3 inches by 25 feet 9 inches, and is 26 feet high above the floor-level. It is interesting as representing the type of the early Buddhist halls; but being the copy of a wooden building, its excavated substructure was unequal to the support of the immense mass of material above, and a huge transverse crack occurred obliging the work to be abandoned. For this crack there is no remedy that I can think of; *the sand should be cleared away from around the monolith.*

32. No. 43, *Dharmaraja's Ratha* (see sketch facing page 15).—Is the highest of the group, but, like everything else, is unfinished. In plan it measures 29 feet square and is 54 feet 9 inches high without the *finial, which has fallen down, and, if found, should be replaced.*

33. After the sand has been removed from the temples and monoliths Nos. 37 to 44, *it would protect the monuments to surround them with a substantial wall so as to prevent the sand from drifting back.*

34. *In the case of caves 44, 46, 48, 50, 51, and 52, means should be taken to prevent the interiors from being used as dwellings, cook-houses for fishermen, or cattle-sheds; and this can only be efficiently done by fencing round the entrances so as to prevent access to any but authorized persons.*

35. Unless the areas, in which quarrying is to be limited, can be clearly defined by substantial walls, *it would be better to issue an absolute prohibition, which would be more likely to be strictly complied with than any partial restriction.*

36. *A native custodian should be always on the spot to prevent damage or maltreatment, and to ensure this there must be appointed in order that a proper relief may be observed.*

Velur or Vellore.

37. Velur is reached *via* Arcot Junction by the Madras Railway, and is 80 miles from Madras. The town and fort are nearly 4 miles from the station. The fort, surrounded by a deep ditch, contains a most remarkable pagoda, which I visited on the 18th February 1881. It is dedicated to Siva, and consists of two rectangular enclosures, each with a *gopuram* or gateway. The outer *gopuram* has eight storeys, and is 100 feet high. On each side of the entrance are two *dvarpala*, or portiers of blue granite. *The lower part of the gopuram is obscured by earth, the accumulation of which should be removed in order to make perfect what has been so well done to rescue the buildings inside the temple from maltreatment (see sketch).*

38. The interior colonnades are picturesque and effective objects in themselves; but the gem of the whole place is a stone pavilion to the left as you enter through the *gopuram* from the outside. It is called the "Kalyan Mandapam," dating from A.D. 1350, and is a remarkably beautiful and elaborate edifice. The figure carvings,

which are most appropriately applied to pillars, plinths and ceilings, are, together with other ornaments, chiselled with the most consummate skill and effect.

39. The front row of columns—six in number—are monolithic, representing rearing horses, griffins, and elephants. The portico or antechamber has a wonderfully carved and painted ceiling of stone. Beyond this is the sculptured support for the idol.

40. This building, as well as all others in the pagoda enclosure, was, until quite recently, partitioned off, whitewashed and bricked up to suit the requirements of an arsenal store. Owing to an order of the Duke of Buckingham, this has all been remedied, and Captain McNeil Campbell, A.E., Executive Engineer at Volar, has most skillfully rescued the whole of the pagoda—removed tons of earth from the floors of the enclosures, pulled down all the unsightly partition walls, and cleaned the Kalayan Mandapam (see sketch) from top to toe of its unsightly whitewash. The place, with its marvellous sculptures, showing prodigious labor, is a complete study of Southern art, its restoration being a work of the most creditable kind. Captain Campbell has some plans showing what the arsenal enclosures were, and how they blocked up the pagoda corridors and buildings.

Trichinopoly.

41. Trichinopoly is 252 miles distant by railway from Volar, and situated on the river Kaveri, about half a mile from its banks. The Muhammadans call it "Natar Nagar," from a saint "Natar," whose tomb still exists and is described further on. Trichinopoly possesses considerable historical interest, having played an important part in the war between the French and English; and the house below the great Trichinopoly rock in which Clive lived is still shown.

42. The principal monuments are—

- (1) The rock, 236 feet high, and its temples.
- (2) Toppa-kulam, or tank, at the foot of the rock.
- (3) Fortified pagoda at Wynandien Tirumali.
- (4) Tomb known as "Chanda Sahib's."
- (5) The Dar-ul-Umara, Palace of the Nawabs of the Carnatic and mosque.
- (6) Tank where Bishop Heber was drowned.
- (7) The great temple of Srirungam.
- (8) The temple of Jambukeshwar.

43. I visited the above-mentioned buildings at Trichinopoly on the 17th and 20th February in the order in which they are named. Mr. Sewall, the Collector, gave me every facility, and very kindly accompanied me to the buildings.

44. No. 1, the rock of Trichinopoly and its temples.—Previous to the order given in 1845 to demolish the ramparts, the rock formed the citadel of a large fort, one mile long by half a mile wide. Now the fortifications are demolished and only those of the rock remain.

45. To ascend, a very picturesque gallery has to be traversed with columns of grotesque carvings (covered with whitewash, which should be removed) (see sketch). Higher up is the *mandapam* or antechamber of a temple to Siva. The steps of the ascent caused a frightful disaster to a panic-stricken crowd of Hindu worshippers in 1849. Passing up higher still over steep steps cut on the rock is the temple to Ganesha on the summit. From the verandah a fine panoramic view may be had of the surrounding city and country, and its elevated position—some 236 feet—commands the plain for over 20 miles. The destructive influence on temples and

their approaches are dirt, whitewash, and leaky roofs; and until means are found to systematically clean out the offensive dirt, to remove all traces of the disfiguring whitewash, and to keep the roof secure against rain, this most picturesque spot will gradually lose its attractions.

46. *No. 2, the Teppa-kalam.*—At the foot of the rock to the west is a fine tank with steps down to the edge of the water. In the centre is a *mandapam* or pillared porch. The houses round the tank were once occupied by Europeans, and one is pointed out as having been Clive's residence.

The tank and its central mandapam should be kept in repair.

47. *No. 3, fortified pagoda at Wyacandan Tirumali* (see diagram).—Wyacandan is a village on the road between Trichinopoly and Alluturai, and about 3 miles from the former. The fortified pagoda in the village was occupied by the French in 1753, and recaptured by the British troops under Major Lawrence. The accompanying rough diagram, which I made in February last, shows the disposition of the walls and the position of the circular bastion, the raised terraces of which supports the various temples. The different gateways or *gopurams* are covered with inscriptions which remain to be translated; but, as far as I am aware, nothing is known of the history and date of the buildings. The districts of Madura and Trichinopoly were constantly devastated by the incursions of the Muhammadans, and it is probably due to this that the pagoda was fortified and made a stronghold. The peculiar design renders the place specially interesting, and its more modern associations make it interesting, independent of its architecture; so that even if the elucidation of the inscriptions brings no fresh facts to light, the place is worth preserving. *A moderate sum would permit of the removal of destructive weeds and creepers, and of the eradication of whitewash from the masonry of the various structures.*

48. *No. 4, Chanda Sahib's tomb.*—The remains of Chanda Sahib (murdered in 1752 by Manikji, who commanded the Tanjore force in alliance with the English) are interred at the shrine of Natar Aulia. The tomb of this latter saint has the appearance of having been converted out of the materials of Hindu buildings, and may have been erected about the time of the invasion of Malik Kafur, who came from Delhi in A.D. 1310.

49. Be this as it may, Natar Aulia is a person of great local sanctity, and is said to have come from Constantinople many hundred years ago.

50. Chanda Sahib built the dome of the edifice. The railings round the two tombs in the building are of pierced metal-work of very singular design. *The buildings are somewhat looked after by the Muhammadans of the town, but greater attention is much wanted to ordinary repairs.*

Illustrations required.
The tomb and its surroundings are worthy of illustration as early examples of Mussulman architecture in Southern India.

51. *No. 5, the Palace of the Nawabs of the Carnatic.*—The palaces and gardens at Trichinopoly [known as the "Dar-ul-Ummra"] were built about A.D. 1660 by Choka Nayakkun, when he removed his capital from Madura to Trichinopoly.

52. The buildings and grounds became the property of the Nawabs of the Carnatic; but the estate was bought by Government in 1860, and is now in process of conversion into district offices. The more the palace buildings are utilised and occupied, the better chance will there be of preserving them and preventing their falling into complete ruin. The architecture is of a clumsy Saracenic kind, the plaster enrichments of the Audience Hall being the best features of the style.

53. The mosque near the palace was built after A.D. 1725, and is architecturally unremarkable compared with Saracenic buildings further north. *As an example of the southern style, it is, however, worthy of better custody and keeping in order.*

54. No. 6, the tank in which Bishop Heber was drowned.—Near the house in which the Judge of Trichinopoly holds his court is a small open tank in which Bishop Heber was found dead on the 3rd April 1826.

55. *I would suggest that a brass tablet put up to mark the spot would be a fitting memorial.**

56. No. 7, the Great Temple at Sritangam (see diagram).—The following description of the temple at Sritangam is taken from Moore's *Manual of the Trichinopoly District*:—

"The entire mass of building consists of seven enclosures, in the centre of which is the shrine of the divinity known as *Ranganudaxami*. This shrine is surrounded by a wall measuring 245 feet by 180 feet; the second enclosure is 421 feet by 301 feet; and the third 759 feet by 510 feet. Europeans are not allowed to enter these enclosures. The fourth, in which is the 1,000-pillar mandapam, to which the great idol is brought every year at the great festival known as *Faikanta Ekadasi*, measures 1,215 feet by 865 feet. Over the gates at the entrances to this enclosure are three gopurams, of which the eastern is the finest in the whole temple. It is known as the "*cellai*" or white gopuram, and is 146 feet 6 inches in height. There are altogether fifteen gopurams in the entire group of buildings. Of these there are four in each of the three outer walls and three in the one next in order. There is at present no gate or gopuram on the western side of this enclosure; but tradition states that there was a gate there formerly, but that it was blocked up because a number of the inhabitants of the portion of the town near it had entered through it and plundered the pagoda. The gate over which is the *cellai* gopuram leads into a yard to the south of the 1,000-pillar mandapam, in which the only respectable specimens of stone carving in the temple are to be found. Even these, however, are by no means remarkable, and are not for a moment to be compared with those in the great pagoda at Madura. During the annual festival, which has been already mentioned, this yard is covered by a *pandal* erected every year at a cost of about Rs. 3,000. * * * *

"Running round this (*fourth*) enclosure there is a street in which there are ordinary dwelling houses and shops. The fifth wall measures 1,610 feet by 1,307 feet. Outside is a second street, and then a wall of 2,109 feet in length by 1,845 feet in breadth. This wall is surrounded by a third street, and then comes the seventh and last wall, which measures 2,000 feet by 2,517 feet. This wall is built of fine cut stone, and is 20 feet 8 inches in height and 6 feet broad at the top."

57. Sritangam is over 4 miles from the Trichinopoly civil station, and is on an island formed by the Kaveri and Koleru rivers. The sketch shows the appearance of the temple enclosures and gateways from the top of the unfinished gateway of gopuram to the south. The diagram explains the general disposition of the temple buildings; but nothing can be accurately or satisfactorily specified for the measures necessary to their preservation until a regular survey has been made of the whole area.

Survey required.

For this purpose I intend sending a party of surveyors. In the meanwhile it may be useful to note the most interesting parts of the temple and what struck me as necessary at the time for their proper conservation.

58. The income reaches Rs. 60,000 a year, and out of this the cost of repairs could be afforded. The unfinished gopuram (A) measures 170 feet by 114 feet. The four gate posts are each of a single slab of granite, 36 feet high and 3 feet

* Mr. Grant Duff has ordered the tank to be repaired and enclosed by a railing.

square. Had the grato been finished it would have risen to a height of about 300 feet. As far as it has got, the design is in excellent taste and well proportioned. Its completion would add enormously to the architectural appearance of Srirangam, and there are many rich native gentlemen who could well afford to bear the cost (see sketch).

59. *The vegetation which is damaging the masonry should at all events be removed, and the roof should be rendered secure against rain.*

60. The next object of interest is the gopuram (at B), which has a painted ceiling with the four incarnations of Vishnu and other subjects. The colours are good, and should be preserved by cleaning and covering with a hard transparent varnish.

61. The mandapam (at C) is where the temple jewels are shown to visitors. Photographs wanted of the temple jewels. Some of them are very fine specimens of goldsmith's work, and should be photographed. The

1,000-pillar mandapam (which, I think, is correctly placed at D) has columns of single blocks of granite, all more or less elaborately carved, and the whitewash which covers them ought to be removed.

62. The finest gopuram is that (at E) called the vellai gopuram. *With the exception of a few repairs, it is in fair condition.*

63. *The Temple of Jambukeshwar at Srirangam* (see diagram No. 8).—About 1½ miles from the great temple to Vishnu is the pagoda sacred to Siva; and although much smaller, it far surpasses the larger building in beauty and architectural dignity. There are many inscriptions on the walls of the temple, one dated A.D. 1481-82, which, if correct, makes the edifices of much earlier date than supposed by Mr Fergusson. Until the archaeology of Southern India has been scientifically investigated, the dates of buildings cannot be fixed with any degree of certainty, and there is nothing save the architectural styles from which to formulate chronological data.

64. The Trichinopoly Manual by Moore states that this pagoda had an endowment of 64 villages in 1750; but in 1851 an annual money allowance of Rs. 9,450 was given in lieu of the lands, and this sum is paid every year to the Trustees. The building is in many places much ruined and filthily kept; and, as Mr. Moore remarks, "the funds available for its maintenance would be quite sufficient to keep it in good order if they were devoted to their proper object; but this, it is needless to state, is not the case."

65. Mr. Fergusson, who visited Srirangam many years ago, writes: "One of the great charms of this temple when I visited it was its purity; neither white-wash nor red nor yellow paint had then sullied it, and the time-stain on the warm coloured granite was all that relieved its monotony; but it sufficed, and it was a relief to contemplate it thus after some of the vulgarities I had seen. Now all this is altered. Like the pagodas at Ramisseram, and more so those at Madura, barbarous vulgarity has done its worst, and the traveller is only too fully justified in the contempt with which he speaks of these works of a great temple which have fallen into the hands of such unworthy successors."

66. I am not in a position to give an accurate description of the various measures necessary to preserve this building, and cannot do so until a survey has been made in

detail; but the place might easily be kept clean, and the whitewash should be removed from all sculptured masonry. I was much struck with some of the wooden gairways of the gopurams, which are handsome in design; but these have been greatly spoiled by being plastered over. The proper way to preserve wood is to keep it clean with soap

and water, and to periodically oil with some vegetable oil and thoroughly rub dry, so as to prevent dust from collecting and caking on the surface.

Madura.

67. Madura is one of the most interesting places that I have been to in India. The peculiarities of Dravidian art are more marked here and more grotesquely elaborate than in any other Southern city that I know of. The great Hindu pagoda is a mass of picturesque gateways and temples; magnificent and grand in general effect; whilst their stone sculptures are unsurpassed for finish and marvellous elaboration. This cannot fail to be the impression produced on every attentive spectator. The temple buildings are, moreover, not deserted like so many of their class throughout India, but are at all hours thronged with Brahmans, worshippers, buyers, and sellers: in this respect rivaling the busy religious spectacles which rapidly succeed one another at Benares.

68. The activity of Hinduism, both in its religious and artistic aspects, is of the first interest at Madura. A secondary feature of the place is the architectural style of its place.

69. "The civil buildings," writes Mr. Fergusson, "are all in what we would call a pointed-arched Moorish style, picturesque in effect, if not always in the best taste, and using the arch everywhere and for every purpose." In the temples the arch is never used as an architectural feature. The distinction between the civil and religious art kept up at Madura, as elsewhere, by the Dravidians is very singular and interesting to study. My visit in February last was unfortunately far too short to permit of sufficient examination of the buildings; but before making a survey on which to base detailed recommendations for conservation, it will be of some value to briefly record what I did see and what are in my opinion the more simple and obvious remedies.

70. Mr. Stokes, the Collector, afforded me every facility for visiting the temples and palaces; and without his help it would have been difficult to see everything in the time at my disposal.

71. *The great temple at Madura* (see diagram).—The invasion in A.D. 1310 of Southern India by Malik Kafur caused the overthrow of the original temple, built probably some centuries before Christ.

72. The present edifices were for the most part built by Trimal Nayakka in the first half of the seventeenth century. The enclosure is a rectangle, measuring 869 feet long by 747 feet wide. The diagram gives an idea of the various parts of the building. There are two temples in the centre—one dedicated to Siva, i.e., called Sundereshwar, and one to "Minakshi," the fish-eyed goddess, the consort of Siva. These sanctuaries are said to date from A.D. 1520, but the more magnificent buildings are of Trimal Nayakka's time.

73. The enclosure possesses four large gopurams or gateways and six of less importance; a beautiful tank called the Potramara-culam (i.e., for the purpose of drawing a *teppam* or lighted raft in procession round it), surrounded by a handsome colonnade; and a hall of 1,000 pillars with sculptures of singular merit unequalled elsewhere in India.

74. Some of the figures carved against the pillars are not only spirited in action, but of superior rendering. *The whitewash now on them should be removed at any cost.* Outside the principal enclosure of the temple to the east is the hall or mandapam built by Trimal Nayakka for the reception of the deity of the Temple (see B). It measures 321 feet long by 79 feet wide, and consists of four ranges

of columns, all most elaborately sculptured and some with rampant "*Yalis*," or monsters, and others with human figures (see sketch). *Detailed illustrations would be valuable.*

The effigy of Trimal Nayakka is in the central corridor, with a canopy over it; the figure is brilliantly painted. At one end of

Illustrations wanted.

the central corridor is a handsome black basaltic stone canopy. *The hall is used as a market, and is very dirty and neglected. It should be cleared out, cleaned, whitewash removed from pillars, and the roof and parapet repaired.* At the east end of the hall is a gateway commenced by Trimal Nayakka (see A), but never finished; it measures 174 feet by 107 feet, and if completed would have been the most important gopuram in Southern India.

75. The great gopuram (see sketch and C in diagram), which is the principal entrance to the temple, has an elaborately carved stone base, and a superstructure of masonry and plaster, nine storeys in height, covered with the most intricate ornaments and figures.

76. The plaster is painted in brilliant colours, but at a distance the general tone is neutral, and not by any means inharmonious.

77. The entrance to "Minakshi's" temple is to the south of this gate, and its elaborately painted facade of plaster ornamentation and figures is a most picturesque object, although grotesque in detail. Between the two gateways is a row of braziers' shops, where brass vessels of excellent shapes are made.

78. The wooden doorways of the great gopuram (C) and of other entrances to the temple are handsomely carved, and the wood-work should be preserved by cleaning and oiling. The two entrances of the temples (at G and H) have archways of brass handsomely designed for the reception of numerous emblems.

79. The carved stone figures in Sandareswar's temple (at K) are larger than life and spirited. *They require keeping clean.*

The wall (L M) at the back of the two temples is covered with inscriptions.

80. The colonnade of the tank (at E) is brilliantly painted, and there are some representations of the most famous Indian pagodas.

81. Near the mandapam now used as a bazaar (at O) is a black stone with inscriptions.

82. *The pagoda is very wealthy; has an endowment from Government, and receives frequent gifts of great value from its worshippers. Repairs were going on during my visit, and the place is evidently over and much money spent in renovations; but the halls should be kept clean and the carved pillars and ceilings should be freed of whitewash. Until this is done, no wealth of gifts spent in painting the exterior of the various gopurams will prevent the deterioration of the singular artistic merit of this wonderful pagoda.*

83. *The temple jewels, which are of considerable value, should be photographed.*

84. *The Teppa-bulaw Tank.*—This tank measures 995 feet long by 742 feet broad, and has a central garden, with a *vimanah* in the centre and four pavilions at the corners. The wall which fences in the tank is much defaced by stripes of red and white colour.

85. *Trimal Nayakka's Palace.*—About one and a half miles from the station is the Palace of Trimal Nayakka. He came to the throne in A.D. 1623, and

reigned thirty-six years, during which time he built the Madura pagoda and palaces.

86. The diagram will give some general idea of the arrangements of the latter, although it has no pretensions to accuracy. The sketch shows the interior courtyard and its surrounding arcades.

87. Passing through the portico erected to Lord Napier on the east side, the quadrangle is entered. The pillars which carry the arches are of masonry, and the foliated brick arches are of chumam. The wagon left seen in front (see sketch) has been repaired under Mr. Chisholm, and the whole of the buildings are gradually being restored to serve as offices for the Judge and Collector; but unless more rapid progress is made, the ruined portions of the buildings stand a very fair chance of coming down altogether.

88. The height of the massive columns gives great dignity to the building, and the plaster enrichments, both inside and outside, are very remarkable and effective specimens of their class.

89. It is difficult to believe that the grotesque and elaborate architecture of the pagoda, and the plain and almost classical treatment of the palace buildings, are of one period and erected by the same man.

90. *Details are wanted of the latter, which are fine examples showing the influence of Mussulman art on the indigenous architecture of the South.*
Illustrations wanted.

91. *The Tankam.*—The "Tankam" is a palace building of the same period erected for wild beast fights. It is now transformed into a residence; but the interest which attaches to its original use is sufficient reason for keeping it in substantial repair.

Tanjore.

92. *The Great Pagoda.*—I am indebted to Mr. E. Forster Webster, the Collector, for very valuable aid and assistance during my stay at Tanjore, which enabled me to see in a short time the buildings here noted on.

93. Tanjore is 31 miles from Trichinopoly by the South Indian Railway, and is the head-quarters of the richest Collectorate in Southern India. It became the capital of the Chola Kings, who were powerful in Tanjore, several centuries ago, and a very remarkable temple was erected by these rulers.

94. "The great temple of Tanjore," writes Dr. Burnell in his pamphlet, "is really the most remarkable of all the temples in the extreme south of India; is one of the oldest; and as it has been preserved with little alteration, if not perhaps the largest, it is the best specimen of the style of architecture peculiar to India south of Madras. This style arose under the Chola (or Tanjore) Kings in the 11th century A.D., when nearly all the great temples to Siva in Southern India were built, and it continued in use in the 12th and 13th centuries, during which time the great temples to Vishnu were erected. Up to the beginning of the 16th century these temples remained almost unchanged; but at that time all Southern India became subject to the Kings of Vijayanagara, and one of these, named Krishnaraya (A.D. 1500-30), rebuilt or added to most of the great buildings of the South. The chief feature of the architecture of this later period is the construction of the enormous gopurams which are so conspicuous at Conjeeveram,

Chedambram, and Srirangam. All these were built by Krishnaraya; they do not form part of the original south-east style, but were intended as fortifications to protect the shrines from foreign invaders and certain plunder and desecration, as the Hindus of the south-east first discovered on the Muhammadan invasion of A.D. 1310.

"To the archaeologist the temple and its ritual are of little interest compared with the inscriptions which cover the walls. A part of these was photographed in 1859 by order of Sir C. Trevelyan and published by the Government, but without result. In 1871 I made out the character, and the whole has been copied, under my direction, by a learned Tamil scholar, Madura Muthai Pillai, whose transcript will shortly be published. Nearly all of these inscriptions—there are only two or three of a later date—belong to the reign of Vira Chola, or from A.D. 1064 to 1114.

"The whole of India, which in the 11th century remained subject to Hindu kings, then became subject to Vira Chola, and he was, beyond doubt, the greatest Hindu king known to history. As these inscriptions state, he did not spare the kings he conquered; and the enormous plunder which he gained became the chief means of building and endowing the great temples of the South."

95. The services of the great Tanjore temple are conducted on a modest scale, since it has lost its large revenues, and it is dependent on the Princess of Tanjore, who provides an annual sum of Rs. 12,000 for maintenance and repair.

96. The plan of the pagoda has greater stateliness and propriety than seen in other Madras buildings of that class, and the appearance of the various edifices is not marred by being too close together.

97. On entering through the two gateways at the east end of the enclosure (see diagram) there is a small temple (C) where sacrifices are offered. A great deal of whitewash and paint disfigures the stonework. The great bull Nandi, in solid granite, over 12 feet high, is directly in front and covered by a mandapam, the masonry of which has been rudely painted in yellow and red, which is offensive. Further west is the great Vimana containing the lingam, and its tower, 200 feet high, stands out well against the sky (see sketch). The base of the building is covered with inscriptions in the old Tamil of the 11th century, and one of them records the conquest by Vira Chola of Bengal and Northern India. Frequent repairs have been executed to the temple and its great tower, but it stands in need of being cleaned of the stripes of paint that damage the plinth.

98. To the north-west of the enclosure (at D) is the beautiful temple to Subrahmanya (see sketch); the base of the tower is 45 feet square, and the superstructure 55 feet high. The pilaster and pillar treatment of the façades is as good as possible, deserving detailed illustration. East of the tower is a building 50 feet long and a mandapam beyond, 50 feet square. This latter is partitioned up for storing temple furniture, and on the walls are a series of paintings of the Tanjore Rajas. Dr. Burnell considers the building to be about 350 years old. East of the Subrahmanya shrine is a Chandikasan temple (H), and further east a small temple to Durga. In the south-west corner of the enclosure is an unimportant temple to Ganesa. The colonnade of the outer wall has 108 lingams and shrines, and the inner walls were in 1875 painted in fresco to represent the various incarnations of Sundereshwar, the form Siva took at Madura.

99. I recommend the eradication of all whitewash from the buildings, that their roofs be kept in substantial repair, and that the mandapam to the Subrahmanya temple be cleared out and left as originally designed. Illustrations of the temple would be valuable.

Illustrations wanted.

100. *The Tanjore Palace.*—The palace of the Princess of Tanjore stands in the greater fort, and is a mass of masonry not very different in style from the Madura palace, but commoner and more vulgar. The Durbar hall is a most grotesque rendering of Hindu and Muhammadan architectural features, and, if not beautiful, is a curious example of the civil architecture of the Mahratta rulers, and should be preserved. There is a statue in white marble, by Chantrey, of Sharfoji, the last Raja but one. The court round the hall is decorated with black and white ornament resembling Italian Sgraffito work, and on one side is the library which contains an unique and valuable collection of Sanscrit manuscripts, of which Dr. Burnell has made the catalogue. Among them are works on architecture or "shilpishastras," a translation of which would be a most valuable contribution to Indian art.

101. The Mahratta hall of the palace was under repair during my visit. The interior is painted brilliantly, and there is some coloured statuary in the upper part, which is well executed, although not in the best taste. *Plans and illustrations of the palace buildings would be interesting.*

Kombakonum.*

102. Kombakonum is a town in the district of Tanjore and possesses two important Hindu temples. The larger of the two is dedicated to Vishnu and the smaller one to Siva; both buildings are in the centre of the town, about a mile from the railway station on the South Indian Railway. There is a third pagoda of less importance.

103. *Fishan Pagoda.*—The Vishnu temple has a great gopuram of 12 storeys and 147 feet high, richly ornamented with human and animal figures. Near this is a small porch and two processional cars of carved wood and intricate in design. One is of great size and elaboration. The ceiling of the gopuram of the temple is well painted and pleasant in tone. The interior buildings are nothing remarkable. The inner court measures 88 feet 6 inches by 55 feet 8 inches, and, besides having offensive odours, is liberally treated with red and white paint, against which the voice of local authority might with propriety be raised.

104. *Siva Pagoda.*—The temple to Siva, called the Kumbheshwara pagoda is approached by a corridor, 530 feet long and 15 feet wide. There are shops on both sides, and this gallery is the most singular feature of the place. The principal gopuram is 128 feet high, and leads to a court 83 feet by 55 feet. This is very dirtily kept, and the vimanah bricked up and plastered. Outside the temple are four wooden cars, all more or less covered with carvings in wood. These cars are singular forms of native religious art, and the carvings are very good of their kind. Unfortunately, and in too many instances, the beauty of the carving is utterly destroyed by coatings of oil, which with dust coagulates and forms a hard and hideous coating. A copy of one of these temple cars would be a valuable addition to the India collections at South Kensington.

* The Honorable Anantaji Seshya Sastri, C.S.I., who resides at Kombakonum, takes great interest in the ancient Madras architecture, and I had a long and most profitable conversation with him. He pointed out how the Shastras enjoin Hindus to attend to the seven charities or Dharmas of (1) temple-building, (2) foundation of brahmin villages, (3) tank excavation, (4) well-sinking, (5) plantation of shady groves, (6) erection of drinking fountains, (7) building of "Chattrams" for the free distribution of food to travellers.

105. The Ramaswamy temple has only one gopuram leading into the enclosure. The columns of a mandapam here are massive and well carved. *The usual whitewash and plentiful rubbish and dirt defile the place.*

106. *The wooden gateway of the entrance gopuram is handsomely carved, and the only remaining half of it is worth preserving by repair, cleaning, and oiling.*

Chillambaram.

107. *Pagoda.*—Chillambaram in South Arcot on the South Indian Railway has a pagoda of considerable antiquity and interest.

108. It covers an area of 39 acres in the centre of the town, and is the property of a class of Brahmins called Dikshatars. The South Arcot Manual by Mr. Garstin, of the Madras Civil Service, says that in 1878 there were 253 married members of the institution who were on duty, twenty at a time, and each batch stays on duty for twenty days until each has performed service at the various shrines. These Dikshatars go in turn into the country to collect alms and wander over the whole of Southern India. The pagoda possesses no landed endowments, but money seems forthcoming, and I was told that nearly two lakhs of rupees had been promised for repairs. In A.D. 1785 a widow is said to have spent two lakhs in repairing the gopurams after the French occupation and partial fortification. The pagoda has a reputation for great antiquity, some authorities going so far back as the 5th century; but from the style the greater part of the buildings dates from the 15th to the 16th century A.D.

109. The sketch diagram explains the disposition of the various buildings which are within the enclosure.

110. The principal temple to Siva (at A) is nothing very remarkable. The treasury, which is within the second enclosure, has some fine wooden carvings under the eaves of the copper roof. The Govindah temple is also here with its mandapam, which, like everything else worth looking at, is whitewashed and therefore defaced.

111. At the back wall of the temple is an inscription in Sanscrit. The 1,000 pillar mandapam (at B) has some fine and massive monolithic pillars about 2 feet square in section and 14 feet high. Some of these are unfinished and some damaged. The roof over the centre nave of pillars is vaulted and full of bats, the floor below being black with their dung.

112. The temple to Subrahmanya (at C) has the best carvings, and its colonnade is most elaborate. The stone-work is said to have been much mutilated by Hyder Ali when his troops were in occupation.

113. The large elephants on each side of the entrance steps are carved in a spirited way. The columns of the temple, which are well worth drawing, are partly disfigured by plaster. The interior has a vaulted roof. Repairs have to a certain extent been executed, but the courtyard of the temple is still strewn with broken fragments of carved masonry *which should be collected and displayed (see sketch).*

114. The temple of Parvati (at D) has a colonnade or porch of handsome pillars, but whitewash spoils the effect of the carvings, and damp has discoloured the painted ceilings. *The inner temple is much defaced, and full of bats and dirt. Cleaning would do great good here, and dirt and whitewash should be removed. The roof too should be made proof against rain.*

115. The west gopuram (at E) is architecturally the least important (see sketch). It has an inscribed stone in the entrance. The gopuram to the east

(at G) is the highest and best preserved. Outside this are five carved wooden cars, finely designed and executed; one is said to have cost Rs. 4,000.

116. The north gopuram (at H) is the second in size. *Vegetation is at work on the lower part, and ought to be removed and damage stopped.*

117. The niches in the basement have figures in black stone well sculptured. The upper part of the structure is of brick and much ruined. Inside the entrance is a fine monolith with inscriptions.

Conjeveram.

118. Conjeveram is a place of very considerable interest, but not frequently visited, as there is no accommodation in the town for Europeans. It is on the South Indian Railway between Chingleput and Arkonum, and 45 miles south-west of Madras itself.

119. *Siva Temple.*—The largest temple of the town is dedicated to Siva, and the object of worship a lingam (see sketch). It is probably the oldest building in the place; but the ancient history of Conjeveram requires investigation.

120. The enclosure possesses some large gopurams, several mandapams and a hall of 1,000 pillars.

121. Two handsome porches are in front of the great gopuram—the doorway of which is handsome and big. Repairs were going on here during my visit, but the institution is not wealthy, having only about Rs. 2,000 annually from Government and villages. The 1,000-pillar mandapam has all the appearance of antiquity, and its ceilings appear to have been handsomely painted, but the damp coming through the roof has caused obliteration.

122. One portion of the building is enclosed for the reception of the temple vehicles and is full of bats. Between the vimanah and the great gopuram is a very old building covered with inscriptions called the Kachimayavam, and is entirely of stone.

123. The pagoda has often suffered through the exigencies of warfare, and has been used in the Carnatic campaigns as a barrack, as a fort, and as a hospital.

124. *It will be necessary to carefully survey the building for repairs; but the inevitable whitewash which abounds with streaks of red paint might be instantly removed with great advantage.*

Survey necessary.

125. *Vishnu Temple.*—The smaller temple dedicated to Vishnu is the richest and most important institution in Conjeveram. It has two enclosures, the inner one being closed to Europeans and unbelievers.

126. The buildings are about 2 miles from the Tehsildar's office, and are approached through a street lined with the houses of Brahmins connected with the temple. Most of the dwellings have wooden doorways singularly well carved, and the inmates show great skill in tracing chalk patterns in front of the temple gate, as well as before their own doors. These tracings are renewed every day, and the patterns are varied and drawn in free hand.

127. The first gopuram is severe in outline and is not plastered over with figures of Hindu mythology. It has a number of inscriptions. Beyond is the 100-pillar mandapam, which is a fine group of masonry sculptures (see sketch). Some were damaged by shot in Hyder Ali's time, but the bases of all the columns are coated with whitewash and paint, which utterly hides the delicacy of the carving.

The whitewash should be removed and the roof made quite secure against rain. At the corner of the eaves are chains wrought out of the solid stone.

128. There is a second mandapam north of this; also a *Toppa-kulam* or tank. The vimanah itself has some fine masonry sculptures; none but Hindus are allowed inside. The gopuram to the east is a fine pile with a few figures on it.

129. The temple jewels are shown near the vimanah to visitors, and are very interesting specimens of goldsmith's art. The total value of the jewels as estimated by the priests is Rs. 1,06,935; among those is a necklace valued at Rs. 3,682 given by Lord Clive. There are some fine solid gold head ornaments for the various idols. *The jewels should all be photographed. Outside the temple is a very fine carved wooden processional car, also worth photographing.*

130. The income of the institution consists of a revenue from lands of Rs. 3,000, and an annual Government payment in lieu of resumed fees of Rs. 9,961.

131. *It will be necessary to carefully survey this pagoda both for repairs and for its interesting architecture and ornaments; but a great deal of preliminary good may be done by cleaning, repairing leaky roofs, and removal of whitewash.*
Survey necessary.

132. *Jaina Temple.*—About 2 miles south of Conjeveram in the hamlet of Tiruparath Kundram is a *Jaina temple*, in which service is still conducted, although in a humble way. The Vijayanagar Kings made grants of land to this temple during the 14th to 16th centuries, as may be seen from the inscriptions; but the Jaina sect is now reduced to 258 in the whole of the Chingleput district. The temple buildings should be carefully surveyed, as they have all the appearance of having been originally Buddhist, and possess artistic beauty of their own. The outline of the buildings bear some resemblance to the Rathas at Mahavallipur (Seven Pagodas) (see diagram).

Bijanagar and Hampi.

133. *Bijanagar Ruins.*—The distance from Bellary (on the Madras Railway) to Bijanagar is 34 miles, and the road is a mere track across a rough country. The travellers' rest-house at Kamalapur is an old temple which has been converted for the purpose.

134. The foundation of the Bijanagar monarchy dates from the middle of the 14th century. The city was built on the right or southern bank of the river Tangabhadra in a plain partly open to the east and west, but to the north-east bounded by a wild and fantastic group of rocks and hills rising to a considerable height, the northern faces of which are almost inaccessible, and which left only a confined space between them and the river. The enciente of the fortifications covered scarcely less than ten square miles.*

135. The plan of the ruined city is taken from one published in Meadows Taylor and Fergusson's book; but a more detailed survey should be made in order to determine what monuments are worth preserving and what measures are possible.
Survey wanted.

136. My visit was made in March last, and Mr. Huntley Gordon, the Collector of Bellary, very courteously accompanied me over the ruins and facilitated my inspection of the principal buildings. The buildings are noted on in the order in which we visited them.

* See *Architecture in Dharwar and Mysore* by Meadows Taylor and Fergusson. — John Murray, 1866.

137. *Elephant stables* (D on the plan).—These consist of a long row of chambers domed over, the centre one having a double storey over it. The architecture is of the mixed Hindu and Muhammadan style, and in this building is less objectionable than in other buildings of the same style at Bijanagar. The masonry is much ruined, and creepers and vegetation should be removed from the roof. *The interior should be cleaned out, and the building placed in charge of a custodian to prevent misuse and damage.*

Bijanagar.

138. *Palace Buildings*.—Near the elephant stables and to the west is an enclosure with a high masonry wall. The buildings are of a form which arose from the influence produced by Muhammadan power and magnificence on the minds of the Hindus, inducing them to copy in their palaces—never in their temples—the more splendid form of palatial architecture.

139. The use of the moose arch in the central pavilion is clumsy and heavy, but the plaster enrichments somewhat redeem the general effect, and are worthy of illustration. *The removal of weeds and overgrowth would do much good here, and the place should be in custody.*

140. *Temple of Victory* (see C on plan).—About 800 yards to the south-west of the palace buildings is a temple in a quadrangle, 110 feet from north to south and 200 feet from east to west. The bas-reliefs on the exterior of the walls are singularly characteristic, and long rows of horses, elephants, camels, soldiers, spirited dancing women, &c., may have led to the name given to the building. The adytum of the interior is supported on four most elaborately carved black basaltic columns, and the ornaments, *which should be illustrated*, are both bold and rich. On the plinth of one of the gateways is an inscription in old Kanarese. The walls of the enclosure are covered with sculptured chariots and sharply-cut medallions and figures *well worth photographing*. *This temple should be preserved and further ruin stopped by propping up the dangerous blocks of masonry, by clearing away jungle and eradicating roots in the masonry joints, and by clearing up and watching.*

141. *The Throne* (see B on plan).—This consists of a succession of platforms, the outer walls of which are carved in relief with elephants, camels, dancing girls. It is about 600 yards south of the palace buildings. The total height of the platform is 31 feet, and there are signs on its summit of a pavilion having existed. Inside this mound is a staircase which is partly blocked up. It goes by the name of "Mahavimi Dibba" or "Dassera Dibba." About 150 yards to the south-east of this is the building and tank known as the

142. *Queens' Baths* (see A on the plan and sketch).—It is 78 feet 5 inches square in plan, with a reservoir in the centre 30 feet 9 inches square and 6 feet deep. The corridor of the building has an arched ceiling richly carved with foliated ornament in plaster, and over the bath on each of the four sides is a projecting window with three openings. The plaster and masonry is much damaged; *but if the roof is rendered waterproof, the building will be a good deal preserved from further damage and ruin.*

143. *Malavanta Ranganthwami Temple* (see E on plan).—This is about 1½ miles north-east of the travellers' rest-house, and stands in a walled enclosure on a rocky hill. There are three gopurams of the usual Dravidian style of architecture. A mandapam inside is the best architectural feature of the place, and is very picturesque with its carved masonry columns. It is roofed over with enormous stone beams, and the roof requires to be made water-tight. *On one side of the building is*

a great mass of debris which should be removed in order to clear the plinth. All vegetation should be removed from the roof and the interior cleared up. One of the temples in the enclosure has a seated figure, probably Jain. The Duke of Buckingham has recorded some wise directions for the preservation of this temple. He says in his note on Hampi :—

144. "This course should be adopted also at the Malavanta Raganathawami Temple, where the surrounding wall gives great facility for its preservation. Worship by pilgrims should in no way be interfered with, but those practices which are no part of religious ceremonies or worship, and by which irreparable injury is done, should be rigidly interdicted, and the interdiction enforced. The principal injurious practices are lighting fires, treasure-seeking, and the building up in all sorts of ways of cells and shelter walls in the interior of temples in gateways, &c. These are done to make shelter from wind for pilgrims and for cattle. They are constructed of mud and of the stones which are nearest to the hand, regardless of what they are of, or the damage which their weight may cause to the masonry on which they are laid, or into the recesses of which they are placed and wedged. I had a large number of those shelters cleared away in my presence from the Raganathawami temple before any photographs could be taken, and then released the mischief so caused.

145. "On the third morning I again visited the Malavanta Raganathawami Pagoda and Mahavami Dibba, at which latter I arranged to have the earth and rubbish so far removed from the decorated walls of the stairs as to expose the whole of the carvings for the photographer. * *

146. "I also visited the Pattabhi Rama-wami Pagoda. It has been defiled and the image removed, but is a large and massive structure with good carving and carvings from its enclosing wall being lined internally with a double tier of granite-built walls, of which a large portion is uninjured. The enclosing wall of this has not been touched, and affords, therefore, great facility for preserving this relic, of which the roof is all but entire, from further injury. Like all others it has become a refuge for goats and cattle, but appears for some reason not to have been a favorite haunt of pilgrim worshippers, and has thus escaped the damaging effect of their cooking fires."

147. *Temple of Vittala* (see F on plan and diagram).—Speaking of this, Mr. Fergusson writes :—

"By far the finest example of the Dravidian style in this province is the porch of the unfinished temple of Vittala* at Bijanagar. In some respects it is as remarkable a specimen as any to be found in Southern India, though far less in extent than those at Ramoserum, Srirangam and Chittanaharan. Like all these it is wholly of granite and in the most magnificent style; each of the great piers supporting the roof being composed of one block from which the slender detached shafts were separated by under-cutting after they were placed *in situ*. The car, too, of the god is composed of only one stone, most probably a boulder found on the spot, for it is scarcely probable that so large a stone could have been moved to the place where it is now found.

"With regard to the date, there does not seem to be any doubt, but that the local tradition is correct, which ascribes the erection of this porch to Achut Rayas, or more probably to the emperor Ramraj during his tenure of power.

"This would place it between the years 1530 and 1542, which from other circumstances seems to be extremely probable as its date."

148. The three temples stand in an enclosure which has four low gopurams—a stone rath or car close to the temple on the right as you enter the enclosure, and two stone pavilions for lodging travellers (see sketch).

149. The principal temple is much ruined—some say by Tippti Sultan—and its present condition is most critical. *The standing portions of the roof should be rendered secure; but I think that any actual restoration would be difficult as well as costly. Jungle should be cleared from the whole enclosure, and destroyed where it has obtained a hold in the masonry. The carved fragments should be collected as far as to be well seen, and the various plinths of the building should be freed of earth and debris.*

* This is a misnomer; it should be "Vittal".

150. Speaking of the Vittalaswami Pagoda, the Duke of Buckingham, who visited Hampi last year, records the following :—

151. " Vittalaswami Pagoda itself is a marvel of industry in carving, and beautiful both in outline and detail, although the carving is not as a whole worked to the finished surface of the monoliths of Madura or Vellore. The delicacy of the columns in their several groups surpasses any work I have yet seen (see sketch). It is much to be lamented that this graceful structure has been so much injured, and that so large a portion has fallen. The injuries appear to me mainly due to treasure-seekers and to pilgrims. The former have in many cases undermined the basements, and the latter by lighting fires for cooking against the pillars have caused the granite to flake, and this process has been constantly repeated until the pillars have become too frail for the support of the massive granite in posts and slabs of the roof. I think that measures should be taken to preserve these ruins of a bygone age from further damage, and that the Collector should be authorised to employ a pensioner or other competent man at a small salary to prevent fires being lit within the temple, or any digging for treasure or stone within the precincts of the temple, or the stalling of cattle in it, and should take measures at the large annual gatherings to prevent injury."

152. *The pagoda at Hampi* (see G on the plan)—Is approached through the Pilgrims' or Kasbin Bazar. Excepting during festivals, these dwellings are deserted; but they form an impressive example of street architecture, and are worthy of illustration.

153. The temple has but one enclosure and two gateways. The design is attributed to one of the Bijanagar Rajas, Krishna Rai, who in the 15th century returned from the conquest of the Chola Rajas of Conjeveram and built the edifice out of the booty which he brought back. The lateral gopuram to the north is a fine pile, and was repaired by Mr. Robertson, when Collector of Bellary, at a cost of Rs. 36,000. The door to the vimanah has some handsome brass-work with hammered ornament, worthy of illustration.

154. *Jaina Temples*.—Above the pagoda on the slope of the hill are some peculiar temples of the Jaina style, and they should be cleaned out and kept in custody.

155. These recommendations are preliminary only; and as I have said, a detailed survey should be made, so that more comprehensive measures may be specified for the consideration of Government.

Note on Works undertaken in Madras, dated 18th September 1882.

Madura.—As already mentioned (see page 8, paragraph 37), Lord Napier first suggested the restoration of Trimal Nayyaka's Palace at Madura, and its utilization for public offices. Mr. Chisholm, Consulting Architect to the Madras Government, has since 1869 had charge of the work which is now approaching completion. The total estimate is Rs. 1,50,000. Mr. Chisholm is about to put his drawings of the palace in a shape suitable for publication, and I hope before long to have them reproduced.

Vellore.—The idea of restoring the beautiful temple in the Vellore Fort was initiated in 1878 by His Grace the Duke of Buckingham, and has been carried out most successfully by Captain McNeil Campbell, R.E., at a cost of about Rs. 3,400.

Seven Pagodas.—The seven pagodas at Mahavallipur, described in my report of the 23rd June 1881, have received a certain amount of attention, an estimate for Rs. 1,190 having received the sanction of the late Mr. Adam on the 12th April 1881. More, however, remains to be done.

Amravati Tope.—These most interesting remains, which have been described at length in Mr. Fergusson's work on "Tree and Serpent" worship, and by Mr. Sewell in his "Report on the Amravati Tope" published in 1880, are situated 18 miles up the Kistna river from Bezvada. Excavations were undertaken by Mr. Sewell in 1877, when 80 hitherto undiscovered marbles were laid bare. Subsequently the Duke of Buckingham visited Amravati, and in 1880 ordered the complete excavation of the place. Since then Dr. Burgess has been to the tope, and in January 1882 packed up all the excavated marbles, hoping to remove them to Madras. I am now about to inspect the locality with the view of preserving these valuable remains *in situ*, if possible.

Undavilli Cave Temple.—This cave temple, which is in the Kistna district, was cleared by Mr. Sewell in 1877 of the accumulated debris of ages.

Old Monuments and Temples in the Fort at Gingi.—In 1872-73 a sum of Rs. 500 was spent in removing brushwood, cutting down trees from the walls and roofs of the buildings, and extracting roots. In 1874-75 an annual grant of Rs. 200 was sanctioned for the preservation of the ruins. In 1878 a special grant of Rs. 250 was sanctioned for improving the access to the hill on which the fort stands.

In 1880 Mr. Chisholm, the Consulting Architect to the Madras Government, submitted a report on the Gingi remains, and wished to remove some of the pillars of a temple to be utilised in building the Madras Post and Telegraph Office, but Government declined to sanction the removal of any of the architectural remains.

Bijanagar.—These fine remains, known as the "Hampi ruins," are described in my Report of 23rd June 1881.

In 1878 a small sum was authorised for the removal of banyan trees which were destroying the buildings. After inspection in 1880 the Duke of Buckingham called for estimates for protecting the temples, and in May 1881 a grant of Rs. 200 was made for clearing away encroaching vegetation.

The Governor of Madras, Mr. Grant Duff, visited Hampi in July last, and more comprehensive measures are now about to be undertaken to repair the various structures.

Surveys have been made during December to July 1882 of Srirangam, Madura, and Ramisseram. The plans and photographs now in course of reproduction show what, I think, is required to preserve the buildings surrounding the great temples at these places.

P

Report on Monuments in Bombay, together with a Note on Works undertaken.

Bijapur.

General description of Bijapur and present condition of its buildings, together with some recommendations for their preservation, and Report on the project for making the city the head-quarters of the Kaladgi District, dated 17th June 1881.

The journey to Bijapur from the Great Indian Peninsula Railway at Sholapur is neither easy nor comfortable. The road is but

Journey to Bijapur.

a made track, and there are no bridges over the Bhima and Sina rivers. A two-wheeled cart or "bandy" is under favorable arrangements drawn by trotting bullocks, and these go at a maximum rate of 4 miles an hour; but allowing for delays in changing at the various stages, for accidents, and for the occasional extension of a wilful pair of animals, cart and all, into the middle of a field, the journey of 61 miles is accomplished in 20 hours. Fortunately, for the future of Bijapur, and for the comfort of those who have to go there, the railway from Sholapur is, I understand, now sanctioned, and the embankments were completed as a relief work during the famine of 1876-77.

2. The name "Bijapur" is said to be derived from "Vijayapur" or "City

Bijapur City.

of Victory," which was a Hindu centre of some size and importance when the Muhammadan

invasions of the Dekhan brought a band of fanatics, who attacked the Brahmins of the City College (the remains of which may be still seen in the citadel), and established themselves in it. This early occupation of the city had, as far as it is known, no immediate effect on the place, nor did it produce changes. It was not until Yusuf Adil Khan in A.D. 1499 assumed independence that the site of the old Hindu town was selected for the new citadel and the surrounding fortifications were built. The former is over a mile in circumference, and has a stone parapet and ditch. The latter consist of massive masonry walls and bastions, the circuit being about 6½ miles.

The plan of Bijapur, attached to this report, is taken from that published in Taylor and Fergusson's volume, and shows the position of the most important monumental buildings. The second plan is annexed more as a curiosity than anything else. It was copied from an old map by a native of Bijapur, who accompanied me round the city, and it gives some idea of the character of the existing edifices and where they are, in and outside the city walls. The sketches are from Colonel Bigge's photographs; and I am indebted to Sir Charles Macgregor, Quarter Master General, and Captain Bell for the permission given for the reproduction of the plates at the Office of the Intelligence Branch, Army Head Quarters.

For some distance all round, the country consists of undulating downs, covered with a stony soil. In the hollows between these downs are lands of a richer quality, and with a plentiful water-supply. Near Bijapur itself the surrounding plain, which is the actual watershed of the general Dekhan plateau, is probably not less than 2,000 feet above the sea. The ground is arid and stony, and there is nothing to meet the eye except occasional clumps of trees about the villages. Although the immediate vicinity is not well cultivated or productive, the rivers

Bhima and Krishna enrich the land on their banks, and produce long tracts which in former days filled the granaries of Bijapur.

3. The buildings at Bijapur form the subject of a large volume published by John Murray in 1866, under the editorship of Mr. T. C. Hope, C.S.;* and this, together with

Publications about Bijapur, what Mr. James Fergusson has since written on the subject in his *History of Indian and Eastern Architecture*, make this famous capital unusually fortunate in the mode and extent in which it has been illustrated and described. The photographs and photographed drawings in the former volume are, however, not all that can be desired. The photographs are not printed by any permanent process, and have faded: the same may be said of the photographed drawings; but, in addition to this, the drawings do not come out well. They are so much reduced as in many cases to be too indistinct in detail, and the absence of all colouring robs many of the illustrations of painted decoration of more than half their value. If these drawings by Captain Hart and Mr. Cumming are available, they should be reproduced in the best possible manner for publication in single plates, and moderately priced, and would then be of great value from an architectural and artistic point of view.

4. Yusuf Khan, to whom the dynasty of the Adil Shahis owes its foundation, was of Turkish descent, being a younger son of Amurath, Sultan of Constantinople, who died in A.D. 1451.

Forced to escape from his home at his father's death, he eventually found himself in India; was purchased for the body-guard at Beder; and subsequently raised himself to independence at Bijapur.

Besides the erection of the citadel and surrounding city walls, the Adil Shahis began their architectural career by utilising the Hindu remains of a temple for the construction of a mosque.

This system was, however, abandoned, and Ali Adil Shah in A.D. 1557 established a new building epoch.

Influenced, probably, with a taste for the Byzantine architecture of Constantinople, he avoided the use of Hindu forms or Hindu details, and developed a style peculiarly local. Unlike the Indian Sarnian architecture of Jaunpur and Ahmedabad, which was adapted and borrowed from the styles of the Hindus, the Bijapur architects introduced a domical style of great grandeur and boldness, more in resemblance to the Pathan architecture which developed in Northern India. The grandeur of effect which the larger Bijapur buildings possess is not easily realised, except on the spot. Photographs and drawings explain the construction and form of the great dome which covers the tomb of Muhammad; but it is in its presence alone that one becomes sensible of the simple grandeur of that wonderful pile. Major Mant, R.E., has left on record his impression that the building is of no architectural interest; but I feel convinced that when he goes to Bijapur and stands before it, he will reverse his opinion.

A complete chapter in the history of Eastern art may be read inside the gigantic walls of the city, and a work of great national importance and of lasting credit to

* Architecture at Bijapur, an ancient Muhammadan capital in the Bombay Presidency, photographed from drawings by Captain P. D. Hart, R.E., A. Cumming, C.S., and Native draftsmen, and on the spot by Colonel Biggs, late of the Royal Artillery, and the late Major Loch, Bombay Army.

the British Government will be accomplished as soon as the buildings are systematically cared for and kept from falling into ruin and oblivion.

5. *Tomb of Sultan Mahmud Adil Shah, otherwise called the Gol Gumbaz* (marked W on the plan).—The mausoleum of Mahmud Adil Shah is one of the most remarkable tombs in India, and its dome is one of the largest masonry structures in the world (see sketch). The building was erected by Mahmud (A.D. 1626 to 1660), but was never quite completed. Besides its remarkable size, its method of construction claims the study and attention of both engineers and architects. The thrust of the enormous domical mass is counteracted by the compression given to the ring of the masonry from which the arching starts. This compression is produced by the weight of an enormous cornice formed out of pendentives acting inwards. On the platform of these pendentives the dome commences with a diameter of 123 feet, thus leaving a space of 13 feet width all round the interior, which forms a very perfect whispering gallery.

The exterior diameter of the dome is 142 feet 8 inches, and the exterior height from ground 198 feet.

The illustrations in Taylor and Fergusson's Bijapur are three wood-cuts of plans one photographic view, and seven photographic plates of drawings.

Repairs to this tomb were executed when Sir Bartle Frere was Resident at Sattara, and have been lately carried on afresh by Messrs. R. B. Joyner and C. Reinhold, Executive Engineers, successively in charge of the Kaldigi Division.

Repairs which were urgently needed to the dome some short time ago have, through the energy particularly of Mr. Joyner, placed the building in security.

Much more remains to complete what has been begun. The rows of large brackets which form the noble cornice over 80 feet high on each of the four exterior sides of the building are much mutilated and fallen, and no amount of money expended on this grand building will be of any availing credit to the British Government until the fallen brackets are replaced. The replacing them at the height of 80 feet is an arduous, but not insuperable, task. I would recommend that a thoroughly strong and secure scaffold be constructed for one of the four sides of the building, and so made as to be available for the other three sides.

Instead of strengthening the corbels, as proposed by Mr. Joyner in his Estimate No. 4 of 1889, with unsightly iron struts and bolts, the whole masonry should be *rebuilt*. This will naturally entail additional cost; but I most strongly recommend this course as being the only satisfactory one.

Inside the tomb and to the north is an unfinished open-like addition intended as a resting-place for Mahmud's mother. Its roofless state is a source of damage in the rains, and *temporary covering would be of great advantage until more permanent measures can be afforded or matured.*

Within the enclosures of Mahmud's tomb a number of natives have erected unsightly dwellings. *These should be removed, and the whole area cleared up.*

The adjoining mosque to the west is a building of interest which should be preserved. During the famine of 1876-77 part of the interior was enclosed for an irrigation office, and I learned, during my visit in March 1881, that it is proposed to convert it into a traveller's bangalow—a proceeding which I consider *vandalistic and disfiguring, and which I strongly advise may be counterordered. The mosque should be cleared of all the enclosing walls and left as originally built and designed.*

The tomb and mosque and nakar-khana should, when the repairs are finished, be handed over to the charge of the district officials, and proper and responsible native

custodians placed in charge to keep the buildings in order. The waiting round these buildings ought to be completed.

6. *The Jama Masjid* (marked V on the plan).—This fine mosque was built by Ali Adil Shah between A.D. 1557 and 1580 (see sketch).

The illustrations in Taylor and Fergusson's *Bijapur* are ground plan (wood-cut), two photographic views, and eleven photographs of drawings. The building was put in repair when the British annexed Sattara. Other repairs latterly found necessary have been carried out, *but the structure wants careful watching to prevent damage by vegetation, or by rain leaking through the domes and roofs.*

The interior is decorated with bands of beautiful tile-work round the arches of the domes, and has a noble "mehrab," which was decorated in coloured and gilt fresco arabesque of the most gorgeous character by Mahmud Adil Shah. *Every means should be taken to preserve this splendid decoration by careful clearing away dirt and dust and by varnishing. There are some good antique prayer carpets (durries) left in the mosque, which should be carefully kept and the patterns copied for use.*

7. *Mihluri Mahal* (marked R on the plan).—The legend ascribing the building of this gateway and mosque to a "sweeper" or "mihlur" of Ibrahim Adil Shah I's reign is not confirmed by local tradition. I was told by a native, whose family has been long located at Bijapur, that the term "mihlur," as applied to the building, signifies "prince"—not "sweeper." The Chiefs of Chitral are still entitled "mihlur"; and it seems much more probable that this beautiful building, a place of Muhammadan worship, was dedicated to a prince rather than to a man of low caste.

The illustrations in Taylor and Fergusson's *Bijapur* consist of a plan (wood-cut) of the gateway, a photograph showing the gateway and mosque, and ten photographs of drawings and details of the gateway by Captain Hart, Mr. Cumming, and the two native assistants. The masonry of both mosque and gateway is exceedingly well executed, and the skilful use of concrete blocks in the construction of floors is an admirable example of how that material is capable of being employed.

The ornamental details of the gateway are exquisitely wrought in stone, and afford the most perfect examples of the stone-cutter's art, whilst the wooden doorways are finely carved in bold design.

The building, in all respects a little gem, is under 30 feet square in plan, has three storeys, and the flanking minarets are little over 65 feet in height (see sketch).

The perforated stone railing or balustrade round the top of the gateway is much damaged, and should be renewed. The brackets and chajjas of the projecting windows are broken, and require restoration. The repair and preservation of both mosque and gateway should be skilfully and thoroughly carried out, and the two buildings given over to be jealously guarded and cared for by responsible custodians.

8. *The Citadel or Arkilla*.—Close to the entrance to the citadel or "arkilla" there are a quantity of Hindu columns which belonged to a temple, and have been recently unearthed. Near these is a mosque converted out of Hindu pillars and other materials of a Hindu temple, and in the enclosure of the mosque is a rude mound, beneath which are the bodies of the Muhammadans who were killed in capturing Bijapur under Mallick Karim-ud-din, A.D. 1312. Some of the columns in the colonnade of the mosque are of a black stone, and remarkable for their singular design and elaborate sculpture. *These Hindu remains should be preserved and not utilised.* Proceeding

further into the citadel the Mecca Masjid is reached—built in Yusuf Ali Shah's time,—a small square building surrounded by a colonnade. The masonry work of the central building is beautifully cut and laid, and the "mehrab" of the mosque very handsomely carved in stone. *This building should be kept in repair.*

The other buildings in the citadel are mostly in a ruinous condition. They were largely constructed of wood, the removal of which by the Mahrattas caused the collapse of so many walls and floors. An exception to these is—

The Ashar Mahal (No. 12 in plan).—This is a very singular building, with large wooden columns supporting the front verandah.

In Taylor and Fergusson's *Bijapur* it is illustrated by a ground plan (woodcut), one photographic view, and six photographed plates of drawings, sections, details, &c.

Owing to its use as a sacred edifice for relics of the Prophet Muhammad,* it escaped destruction by the Mahrattas, and gives a good idea of the character of the palaces that were ruined elsewhere in the citadel and robbed of all their wood-work. The palace measures in plan 135 feet by 199 feet, and has two storeys, in front of which is the verandah with huge columns of wood over 33 feet high. The principal apartments are in the upper storey: they are decorated with coloured frescoes on the walls, with beautifully pierced wooden screens fitted to windows, and with doorways inlaid with ivory. *All of these are much neglected, and deserve a better fate. The frescoes could be cleaned and protected by a hard varnish, and the ornamental wood-work of pierced and inlaid work should be skilfully repaired and carefully oiled. In one apartment are kept some carpets and hangings of State purposes. The workmanship, colouring, and pattern of some of these are first rate and in true oriental style, but they are badly cared for and full of dust. If they are to be preserved, it is absolutely necessary that they be repaired and backed with strong cloth or canvas to prevent them falling to pieces, and hung against walls where they can be seen. The patterns of these carpets should be copied for the use of carpet-weavers in India.*

The remnants of the Adil Shahi library were preserved in the Ashar Mahal, but some years ago were removed by Sir Bartle Frere.

Considerable repairs are required to this building, which now has a desolate and neglected appearance. Some masonry arches were built up by Captain Hart to support and strengthen the roof of the verandah, but these are very unsightly, and a more skilful means of repairing the weakened roof could be employed by renewing timber beams.

The Anand Mahal, Palace of Delight, has some fine concrete floors, and was originally decorated with handsome coloured tile-work. It is proposed to convert this building into the Executive Engineer's residence. The gateway leading to the Anand Mahal has some splendid interior plaster-work worthy of preservation and illustration, and should not be occupied.

The Tomb of Yusuf Turk built by Ishmail Adil Shah (see the sketch) should also be preserved and not occupied.

Gagan Mahal. Arash Mahal. Adalat-ka-Mahal. Chinch Mahal.—The Gagan Mahal is very ruined, but has a grand archway. *Further ruin should be stayed, and the place cleared of debris. The Arash Mahal is intended for the residence of the Civil Surgeon; the Adalat-ka-Mahal as the residence of the Collector and*

Magistrate; and the so-called Chini Mahal or Granary as the offices for the district.

Alamgir Padshah's Mosquer. Pani Mahal. Soneri Mahal. Sath Khundi Mahal Manzali. Chinch Didi Masjid.—Besides these are the Alamgir Padshah's Mosquer, the Pani Mahal, the Soneri Mahal, the conspicuous Sath Khundi Mahal, built by Mahmud Adil Shah, and the Chinch Didi Masjid,—all of which should be cleared of debris and decay arrested, as far as possible, by the extraction of roots and creepers, and by filling in cracks in masonry with cement, so as to mitigate the damage which heavy rain is liable to cause. Debris should be collected in convenient heaps and creepers planted so as to trail over them.

9. *The Great Gun Malik-i-Maidan (A.D. 1548).*—This highly finished gigantic howitzer is of mixed metal ($\frac{1}{2}$ copper, $\frac{1}{2}$ tin), and lies on the outer walls of the city. Its extreme length is 14' 3", and its greatest diameter at the muzzle 5' 2" (see sketch).

It was at one time proposed to remove this fine specimen of ancient casting to England, but fortunately the bad roads put a stop to any such measure. *I recommend that the gun be properly mounted on the bastion where it now rests.*

10. *The Taj Baori (A.D. 1626—1660).*—This is a fine tank of water, measuring 223 feet by 219 feet, marked J on the plan, and has a façade facing the street, with an archway of 35 feet span flanked by minarets over 60 feet high. Two wood-cuts—elevation and plan, together with one photographic view, and two photographs of drawings—are in Taylor and Fergusson's book on Bijapur.

The façade of the building was never completed, and it will much improve the general appearance to finish it.

11. *The Ibrahim Roza (A.D. 1626—1679).*—This is about half a mile from the walls of Bijapur and to the south-east. The Roza or garden is an enclosure, in which are the tomb of Ibrahim Adil Shah II and his family, and the adjacent mosque. An inscription records that the buildings took over 36 years to complete; that 6,533 workmen were employed on them; and that the cost amounted to a sum equivalent to more than half a million pounds sterling.

Both the tomb and mosque are very perfectly executed and finished, and the best preserved of all the Bijapur monuments. They are illustrated in Taylor and Fergusson's volume by a ground plan (wood-cut), by two photographs, and by ten photographs from drawings made by Captain Hart, Mr. A. Cumming, and two native draftsmen. The photographs are, however, much faded, and the drawings do not appear either distinctly or to advantage.

The tomb of Ibrahim is remarkable for the manner in which the interior, 40 feet square, is flat-roofed in concrete faced with stone; also for the very rich ornament which has been lavished on various parts of the edifice.

There are six tombs in the interior, which is a perfectly plain apartment with no ornament save what appears in the elaborate stone trellis-work and tracery of the windows. The geometric devices interwoven with Arabic inscriptions produce a very remarkably rich lattice; but it is in parts much broken, and should, if possible, be renewed.

The outer walls of the four entrances are richly ornamented, and the wooden doors with carvings and gilt metal knobs present a bold and handsome appearance.

The central apartment is surrounded with a double verandah; the inner verandah has most rich and minute carvings on its columns and ceilings. The

exterior surfaces of the main walls were once covered with elaborately painted and gilt arabesques now much faded.

A skilful renewal of this surface decoration would greatly enhance the beauty of the tomb; but it must be done by an expert.

The ceilings of the verandahs want making secure, and one of the arches of the outer row of columns is cracked, and should be strengthened. Whitewash on pillars should be removed by application of strong soda and water and scrubbing off with hard bamboo brushes and palette knives. *All curved wood-work in doors and windows requires preserving by cleaning and oiling. The outside chujjas and brackets want renewal and repair.*

The mosque has a fine colonnade, arched and domed over with great skill and tasteful ingenuity. The whole of the interior and much of the exterior has been whitewashed. The interior walls and arches have been lined and picked out with grey; whilst underneath lies a profusion of coloured decorations. *The building is in need of some exterior repair to chujjas, brackets, roof, cornices, &c.*

The garden requires putting in order, and the vaulted chambers of the four walls which enclose it, and those in the lower part of the terrace which support the mosque and tomb, should be cleaned out. The whole place must be in proper custody to prevent damage and pollution (see sketch).

12. *Project for converting Bijapur into the Head Quarters Station of the Kaladgi District.*—During my visit in March last, I had the advantage of meeting Mr. Reinhold, Executive Engineer of Kaladgi, who lives at Bijapur, and he accompanied me over the several buildings in the citadel which it is proposed to convert into offices and residences for the district officials.

The question of making Bijapur the head-quarters of the district was raised in 1875 by Colonel (now Lieutenant-General) H. St. Clair Wilkins, R.E., then Superintending Engineer. Writing to the Bombay Government on the 31st December 1875 from Bijapur, he calls attention to the approaching visit of the Governor, and requests that his letter may be laid before him; points out that Bijapur is centrally situated in the Kaladgi District; has many advantages over the station of Kaladgi, which he describes as an obscure village. Kaladgi in former days a station of that southern portion of the district which belonged to the Madras Presidency, and when Bijapur pertained to the independent State of Sattara. Kaladgi described as miserably provided with public and private buildings;—as being very inaccessible; of no political importance; climate very hot; visited every few years by cholera; has no cold season; as being depressing to Europeans, with a bad water-supply.

On the other hand, he describes Bijapur as admirably adapted for a head-quarters station; points out that by its adoption money might be saved, since the expenditure necessary at Kaladgi would produce larger results at Bijapur. Bijapur once inhabited by a million people. The fort, over six miles in circumference, is filled with buildings of all kinds which are convertible. The climate of Bijapur is salubrious; it enjoys westerly sea breezes in the hot weather; is not subject to cholera. Its inhabitants speak well of the climate. The water-supply good. He also points out that the resurrection of Bijapur as capital of the district would be an act of political wisdom; that ample accommodation exists for police and troops; that if Bijapur is made the capital, the most valuable of the public buildings and monuments would have a chance of permanent preservation.

Colonel St. Clair Wilkins, again addressing the Bombay Government on 23rd February 1876, enters into the details of the scheme, and points out that the civil officers of the district hold it to be for the public benefit. Bijapur free from cholera since 1872; is situated on the elevated watershed between the Bhima and Krishna rivers. Kaladgi in a depressed basin. Population of Kaladgi 6,591. Population of Bijapur 12,935. Estimated cost of completing buildings necessary to Kaladgi, Rs. 1,04,000. Estimated cost to convert buildings at Bijapur, Rs. 97,000. Suggests that Mr. Molecy, C.E., take up his head-quarters at Bijapur and carry out the alterations.

13. Mr. G. T. Molecy, F.R.I.B.A., C.E., was accordingly appointed Executive Engineer of the Kaladgi district, and submitted a series of estimates and plans for converting the following buildings at Bijapur:—

- (1) Granary of Chini Mahal into offices for the Collector and Judge.
- (2) The Serai into jail.
- (3) The Idgah into Police lines.
- (4) Yusuf Adil Shah's Masjid, &c., into Executive Engineer's office.
- (5) The Adalat Mahal into a residence for the Collector.
- (6) The Dowlia Ykut Mahal into a residence for the 1st Assistant Collector.
- (7) The so-called Chini Mahal into a residence for the Superintendent of Police.
- (8) The Anant Mahal into a residence for the Executive Engineer.
- (9) The Arash Mahal into a residence for the Civil Surgeon.

The last of these estimates is dated 13th September 1876.

14. The Bombay Government issued an order, No. 1862 of 1876, on the 4th November 1876, sanctioning the Bijapur project, but want of funds prevented any allotment being made. The matter was, however, ordered not to be lost sight of.

15. Mr. Molecy's plans and estimates were forwarded to me by the Secretary to Government, Public Works Department, Bombay, on the 7th April 1881, for my opinion and report on the proposed modification of the several buildings at Bijapur.

I have gone carefully over these plans and estimates, and now beg to submit my views.

16. Mr. Molecy's estimate, No. 8 of 1876-77, for the conversion of the *Granary* into district offices, Rs. 20,000.

There is, I think, no objection. This building known as the *Granary* or *Chini Mahal* was erected by Ibrahim, grandson of Yusuf, founder of the Adil Shahi Dynasty, A.D. 1524-48. It is in the citadel or arkilla (No. 7 on the plan), and has a ground and upper floor, and measures 278 feet in length, and forms one end of a quadrangle 365 feet \times 216 feet.

Arched recesses extend all round the quadrangle.

The greater part of the building is taken up by a large domed hall 128 \times 29 feet 10 inches, and rises to the full height of the building. The wings project on

either flank, and were connected by a huge verandah, supported at one time by two wooden columns. Only the masonry bases of these now remain, and all the wood-work have been removed by the Mahrattas.

Some grain, pieces of sulphur, broken glass, and China porcelain were found in the *debris* and in the staircases, which were bricked up in the thickness of the massive walls. These and other discoveries, such as the gun found by Mr. Joyner, should be carefully preserved.

Coloured tiles were formerly used to decorate parts of the building. The west wing is assigned to the judicial branch, and the east wing to the revenue branch.

The body of the building is given over to various offices and to an entrance; record-rooms, cells, &c., are placed in the quadrangle.

Part of the Granary appears in photograph III, Taylor and Fergusson's book.

The great hall should not be disfigured by high partitions, and should be kept free from end to end. Screens would sufficiently divide up the space for offices. The great verandah should be rebuilt.

There is nothing to show in the plans what the new portions will be like in elevation, or what description of doors and windows will be provided. The style of Bijapur architecture should be adhered to throughout, and this may be done even in the most simple way.

The verandah in front of the cells and Judge's room is not in keeping: the arched of the original building should be repeated.

17. Mr. Molecy's estimate, No. 85 of 1876-77, for converting the Serai into Conversion of the Serai into a jail. a jail, Rs. 20,000.

There is, I think, no objection to this, but there are only general ground plans with the estimate, and, excepting some elevations of a new workshop and warder's quarters, there is nothing to show what the buildings will be like.

The serai is 11 miles north-west of Bijapur, and is not illustrated in Taylor and Fergusson's book.

It would be in better keeping, and probably economical, to use nothing but mason arching instead of timber and tiled roofs.

18. Mr. Molecy's estimate, No. 94 of 1876-77, for converting the Idgah into Conversion of the Idgah into Police Police lines, Rs. 24,040.
lines.

The Idgah is shown on the plan. It was erected by Aurangzib in A.D. 1690. Almost the whole of the buildings proposed are new, and only the enclosing wall is to be utilised in the erection of the men's quarters. It would seem, therefore, better to leave the Idgah for the use of Muhammadans, and build the lines on some unoccupied ground.

19. Mr. Molecy's estimate, No. 75 of 1876-77, for converting the existing dilapidated buildings situated within 10 yards to the south of the Anand Mahal into Executive Engineer's Office, Rs. 3,000.
Conversion of the mosque of Adil Shah, &c., into the Executive Engineer's Office.

These buildings are described as the mosque of Yusuf Adil Shah, &c., but no plan accompanied the estimate, although one is referred to.

20. Mr. Molecy's plans for converting the Adalat Mahal into a residence for the Collector. Rough estimate, Rs. 15,000.

This building is of Ali Adil Shah II, and dates A.D. 1652. Its position is shown in the plan No. 4. All the wood-work has been removed.

There should be no pitched tiled roofing, but terrace roofing throughout. There is nothing in the design to show the character of the door and window openings.

21. Mr. Molecy's plans for converting the Dowlia Ykut Mahal into a residence for the 1st Assistant Collector. Rough estimate, Rs. 8,500.
Conversion of the Dowlia Ykut Mahal into the Assistant Collector's residence. I think there is no objection to this; the building is not shown on the plan in Taylor and Fergusson's book.

The Dowlia Ykut *mosque* and *gateway* are shown at T on the plan and in photographs XLIV and XLVI in Taylor and Fergusson's book. I presume it is not intended to touch these in any way.

The plan for converting the Dowlia Ykut Mahal seems to me suitable.

22. Mr. Molecy's estimate, No. 84 of 1876-77, for converting the Chini Mahal outside and to the south of the arkilla as a residence for the Superintendent of Police, Rs. 8,500.
Conversion of the Chini Mahal into a Police Superintendent's residence.

This building is not shown on the plan in Taylor and Fergusson's book. I think there is no objection to its use.

There are no elevations of the house with the estimate to judge from.

23. Mr. Molecy's estimate, No. 74 of 1876-77, for converting the Anand Mahal into a residence for the Executive Engineer, Rs. 4,000.
Conversion of the Anand Mahal into a residence for the Executive Engineer.

I think there is no objection to this building being used. The Anand Mahal was built in A.D. 1581 in the citadel (see No. 3 on the plan).

The plans do not show what the proposed alterations will be in appearance.

24. Mr. Molecy's plan for adapting the Arash Mahal as a residence for the Civil Surgeon. Rough estimate, Rs. 10,000.
Conversion of the Arash Mahal into a residence for the Surgeon.

I think there is no objection to this. The building is 50 yards to the east of the Adalat Mahal (No. 4) in the citadel.

The plans do not indicate what appearance the building will have when altered.

25. *I venture to suggest that the preliminary work for converting the various buildings mentioned be commenced without delay.* If the plans before me had been of sufficient detail, I would have made a design of how I think any one of the buildings should be treated; but if the Executive Engineer, Bijapur, will send me elevations and details of how the buildings would look after the alterations as proposed are carried out, I will, if necessary, make any suggestions for keeping the architecture in harmony with that of Bijapur, and furnish drawings for the purpose. This report is preliminary only, as more buildings than those mentioned remain to be inspected and reported on. For this purpose, and to obtain further illustrations of Bijapur architecture and art, I hope before long to repeat my visit.

Report on Ahmedabad, Poona, Karii, Ambernath, and Elephanta, dated 26th October 1881.

My visit to Ahmedabad, 18th to 21st March last, enabled me to see many of the architectural remains of that very interesting and wonderful city. The opening of the Rajputana State Railway makes the place as easily accessible from the north as it is from the south; and the immediate and first tendency of the improved communication is to damage and misappropriate the picturesque and beautiful buildings of the city. Already one mosque (Mia Khan Chisti's, built A. D. 1465) is used as a residence; and signs are not wanting elsewhere of the readiness, on the part of both Natives and Europeans, to utilise ancient architectural memorials for domestic purposes (see sketch No. 1).

2. I submit that the most complete and proper care should be taken of the Ahmedabad monuments. The city is distinctly one of the most picturesque and artistic in the

whole of the Bombay Presidency, and the number of visitors is now greatly increased. Some of the old tombs and mosques have received repairs and attention, but the number of those that are maltreated is a deplorable condition urgently calling for systematic remedies.

3. The Saracenic architecture of Ahmedabad was inaugurated by Ahmed Shah in A.D. 1411, and, as elsewhere throughout India, the Muhammadans began by building

out of materials taken from Hindu temples. The peculiarity of Ahmedabad architecture is, however, that the Hindu masons who built the later mosques and tombs adhered closely to indigenous forms instead of to those characteristic of the muslims, producing buildings with a larger admixture of Hindu or Jain detail than is seen in other capitals founded by the followers of the Prophet. Added to this, the plans prescribed by the Muhammadans for their buildings imparted to the style a breadth of conception not generally displayed in Hindu architecture, and a singular elegance and character thus appeared in the structures the remains of which lie scattered in the city and the neighbourhood.

4. Mr. James Fergusson, in his History of Indian and Eastern Architecture, has devoted a whole chapter to the architecture of Guzerat, of which Ahmedabad, for the last 450

years, has been the capital; and a volume, profusely illustrated by photographs by Colonel Biggs, R.A., and with historical and descriptive sketches by Mr. T. C. Hope, and architectural notes by Mr. Fergusson, was published in 1866. The plan of Ahmedabad and its environs is taken from the latter work.

5. Mr. Burgess, Archaeological Surveyor in Bombay, visited Ahmedabad in October 1874 and reported on, transcribed and translated some of the inscriptions on the build-

ings (see Archaeological Survey of Western India—Kathiawad and Kachh, 1876).

6. The city walls were built by Sultan Ahmed I in 1412, and were in 1486 so strengthened and repaired by Mahmud Begarra as to make Ahmedabad one of the best

defended cities in India. In the seventeenth century the walls were noticed with wonder and praise by almost all European travellers. During the disorders of the early part of the eighteenth century they fell into considerable decay, and in 1755 the ruins were so heavy that in several places great gaps were created. In the same year Momin Khan put them in repair. But later on, in 1780, they were, near the Khan Jahan Gate, breached by the British. After this gradually became

so ruinous that carts and carriages could pass through, and the city was as unsafe as the suburbs, robberies and murders being common. In the early years of British management (1818-1825) complaints of the bad state of the walls were constant. In 1825 the Collector wrote:—"The city is on all sides open to thieves and robbers;" and in 1828 the circuit Judge drew attention to the state of the walls, urging that some of the city revenues should be set apart for their repair; but fearing that it was too late for any sufficient remedy. Shortly after this, chiefly by the exertions of Mr. H. Borradaile, the Collector, much public interest was taken in the restoration of the walls; a tax on clarified butter was levied, and in 1832, at a cost of £25,000, they were thoroughly repaired.* If Ahmedabad is as alive to its interests now as it was under the guidance of Mr. Borradaile, the whole place would be placed in a complete state of preservation, and every architectural monument would have its responsible guardian.

7. The following accounts of buildings and recommendations for remedial measures are in the order in which my visits were made:—

8. *Sidi Syad's Mosque in the "Bhaddar"* (marked No. 1 on plan).—This very beautiful building is at the north-east corner of the Bhaddar, and was built by Sidi Syad, a slave of Ahmed Shah (A.D. 1411). The Mahmuttas desecrated it; and it is now used as a mamlatdar's kacheri, for which purpose the front openings have been bricked up, the inner columns whitewashed, and the beautiful marble windows of perforated tracery (see sketch No. 7) filled from inside with plaster. The roof consists of a series of small domes beautifully and fancifully corbelled.

9. *The clearing and cleaning of its disfigurements and impediments are urgent remedies which I strongly recommend to Government*; but, to place the building in a suitable condition, an office will have to be provided for the mamlatdar.

10. *Ahmed Shah's Mosque in the "Bhaddar"* [A.D. 1414] (marked No. 2 on the plan).—This is constructed out of Hindu columns put together with an irregularity similar to that observable at the Kutub Mosque near Delhi and at the mosques at Mauda in Malwa.

11. The interior is roofed in by a series of domes of the Jain type, and on one side (to the right facing the west), enclosed by stone traceries, is a raised floor, evidently intended for the ladies of the palace. The *mehrab* in the centre of the west wall of the mosque has an inscription above it. On the right is a marble pulpit. The whole of the interior is very dirty. Some of the domes show signs of leakage; *to remedy this, they want repair outside, and vegetation should be removed*. In front of the building is a grave mound, where repose the bodies of those who were killed in the fight against the Hindus. The mosque is no longer in use, and *should at least be in custody and kept clean*.

12. *The Tin Darwaza* (marked No. 3 on plan).—This is a fine gateway in the city, and used to be an entrance to an enclosure in front of the Bhaddar Gate. In 1877 some repairs were executed, and a hideous roof removed from the upper terrace.

13. *The Jama Masjid* (marked No. 4 on plan).—This is an enclosure measuring about 400 feet by 250 feet, the mosque at the west end being about 200 feet by 90 feet. It is a handsome building (see sketch No. 2); but the minarets flanking the central arch were overturned by an earthquake in 1819.

* See Bombay Gazetteer of Ahmedabad, page 207.

The interior is particularly striking with its colonnade of fine pillars, zenana gallery with tracery, and numerous domes of the Jain type.

14. The *mahrab* is of marble, very effectively inlaid with stone, and has a marble inscription above it (dated 4th January 1421 A.D.). There is an upper gallery round the central portion of the mosque, which gives height and grandeur to that part of the building. Unfortunately all the stone columns and walls have been whitewashed. *The whitewash should be removed.* The tank in the centre of the courtyard of the mosque has been very unsuitably roofed over with corrugated iron.

15. *Ahmed Shah's Tomb* [repaired A.D. 1537—38] (marked No. 5 on plan).—This building, to the east of the Jama Masjid, is a massive edifice with a dome, and has windows of tracery, the ornament of which is particularly effective and handsome. There are some good brass doors to the tomb entrances. *The whole place, which is extremely dirty, should be cleaned and placed in proper custody: vegetation requires removing from the roof; and the rear verandah, which has been ruthlessly bricked up for some wretched squatter, should be cleared.*

16. *Tomb of Ahmed Shah's Wives* (marked No. 6 on plan).—Near Ahmed Shah's tomb stands the enclosure which contains the graves and tombs of the Rania. It consists of a basement raised some 9 or 10 feet above the ground, with a surrounding colonnade screened from the outside by stone tracery of great variety and elaboration. In the court, which is open to the sky, there are several tombs of marble, beautifully wrought in ornamental bands of sculpture; and the monument to Murkhi Bibi, a favourite wife, has an inlay of black marble and mother-of-pearl. *These are beautiful works of art, thoroughly appropriate to their object, and should be completely restored.*

17. A great deal of damage is done to the cloister, its marble terrace, and to the tombs, by trees and creepers; whilst slabs of marble have in many instances been utterly displaced. *The whole of the damaging vegetation should be cutrooted.* The enclosure is surrounded by filthy native houses, and great squalor prevails, *the removal of which would do much good to this remarkable building. There should be a custodian here and the place kept clean.*

18. *Dastur Khan's Mosque* [A. D. Circa, 1486] (marked No. 7 on plan).—Muhammad Begurra's minister, Dastur Khan, built a remarkably elegant mosque in the southern quarter of the city, and surrounded it with a colonnade of pillars supporting small semi-circular domes, and enclosed by perforated stone tracery. The screen-work is very varied and bold in design; but unfortunately some one has thought proper to whitewash the building; and until this is removed and the place cleaned up, its beauty is greatly obscured. Beneath the courtyard is a subterranean reservoir 76 feet square, vaulted over with masonry. The building should be in custody.

19. *Rani Siper's Mosque and Mausoleum* [see sketch No. 3] (marked No. 8 on plan).—The memorials of the wife of Ahmed Shah's son stand inside and near the Astalin gate of the city, and were built in A.D. 1511—1526. Both buildings are of singular elegance, and delicately wrought with carvings and perforated screen-work. The mosque measures 55 feet by 20 feet, and has two flanking minarets, 50 feet high, gracefully tapered and enriched with architectural ornament. A pair of united bracket windows at the end facing the street gives a picturesque appearance to the exterior, and are as good examples of this class to be found anywhere in

Lodia. The three *achabats* inside the building are of white marble, daintily carved, and are worthy of illustration in detail as fine specimens of this particular kind of mosque ornament. *The interior of the mosque is not as clean or properly taken care of as the building*

deserves. The Rani's tomb is an elevated square building with a semi-circular dome, and surrounded by a low verandah with a splendidly incised plinth and enclosed with tracery. *Vegetation on the dome and roof should be removed, and the building put in repair and kept in proper custody.*

20. *Shah Alam* (marked No. 9 on plan).—The Pir Shah Alam, son of Kuth-ul-Alam, the saint of Bhutwa, was buried in A.D. 1475 in a handsome tomb 3 miles from Ahmedabad. After his interment the place acquired other edifices, and was enclosed by a high wall. The tomb is square in plan, surmounted by a dome, and enclosed by a verandah with beautiful stone trellis-work. The central apartment, in which rests the actual tomb, is surrounded by a second row of arcades; and the tomb is covered by a wooden canopy exquisitely inlaid with mother-of-pearl. The interior of the dome is handsomely painted in fresco, and the floor is of marble. A marble fence or low screen encircles the canopy. The outer verandah has an entrance on each of its four sides, fitted with sliding doors of ornamentally-pierced brass plates. At one corner of the tomb are buried the children of Shah Alam. Great variety and fancy are displayed in the patterns of the stone and marble screen-work which encloses the outer verandah and the inner tomb. The building is now in fair order, considerable attention having been bestowed on it by Mr. Borradaile, C.S., late Collector of Ahmedabad.

21. *Mausoleum of Mai Alam at Shah Alam* (see No. 9 on plan).—This tomb is one of the buildings in the Shah Alam enclosure, but is plainer than that of the saint. *The surrounding courtyard requires weeding, and vegetation should be completely outrooted from the building as well as from the terrace.*

22. *Shah Alam Mosque* (see No. 9 on plan).—The mosque has two fine minarets at either extremity of the façade. The interior is a colonnade of three rows of six pillars roofed over with domes and coverings. The masonry is unfortunately disfigured by a layer of whitewash, which should be removed, and the place is rendered still more unattractive by numerous swarms of bees in the domes.

23. *The Kanbria Tank* (marked No. 10 on the plan).—About a mile from Ahmedabad to the south-east of the city is this fine reservoir, surrounded by masonry steps for a circumference of a mile, and with pavilions and a handsome supply sluice. In the centre is a small garden and baradari connected by a masonry causeway. *The place is well worth caring for and keeping in order.*

24. *Sidi Buzir's Mosque and Tomb* (marked No. 11 on plan).—The ruined tomb and still more ruined mosque of Sidi Buzir are buildings worthy of being preserved from further decay. The archway and minarets are all that remain erect of the mosque, and their handsome proportions and the variety in the stone ornaments render them valuable examples of the Ahmedabad style. The tomb is occupied by natives, and presents a disgraceful picture of dirt and neglect. *The place should be cleared and cleaned, and what remains of the buildings ought to be repaired.* The date of these edifices is not known for certain, but they belong probably to the reign of Mahmud Begurra.

25. *Haidut Khan's Mosque* (marked No. 12 on plan).—This is an instance of the way in which the materials of desecrated Hindu shrines were utilised

for the purposes of the Muhammadans. The interior colonnade has pillar shafts of varieties of Hindu ornament, raised one above the other to suit the plan on which the masjid was designed. Built at the time that Ahmedabad was first established, it is not only a monument of historic value, but shows how the local style developed itself architecturally.

26. *Azam Khan's Palace* (marked No. 13 on plan).—Azam Khan in A.D. 1636 caused this building to be erected; subsequently was used as a college; but in 1820 underwent conversion by our Government into a jail, and up to the present time carpets, durris, cloths and basket-work are manufactured by prisoners. The entrance gateway has a handsome dome with ingenious and effective cusplings. Below the dome is an underground chamber or *talkhans* approached by four staircases. This apartment served as a retreat during hot weather, and has in its centre a fountain, around which the inmates of the palace sat or slept in cool seclusion. The conversion of the palace buildings into a jail has destroyed their design and character; but the place is interesting, and its architectural appearance could be easily restored in drawings.

27. *Sirkhej* (marked No. 14 on plan).—Across the Sabarmati river, and about 5 miles south-west of Ahmedabad, is the village of Sirkhej, to which the friend and counsellor of Ahmed Shah, Ganj Buksh, retired to, and died in A.D. 1445. A tomb and mosque were here erected by Kutub Shah in A.D. 1451, and Mahmud Begurra made the locality a resort, built the large tank and palace, and erected a mausoleum for himself and his queen Raj Bai.

28. *Tomb and Mosque of Ganj Buksh at Sirkhej* (see No. 14 on plan).—The tomb of the saint, said to be largest of its kind in Guzerat, is about 130 feet square in plan; the central apartment is surmounted by a flat dome, and the verandah covered with a series of smaller ones. Round the tomb itself is a screen of ornamentally-pierced brass, and the entrance is decorated with mosaics of coloured glass and minor work ("shish"). The exterior of the verandah is entirely filled with windows of perforated stone, and the floor of the verandah is of marble slabs. The masonry of the whole of the building is literally smothered with whitewash, and unless the removal of this barbarous disfigurement can be arranged for, the building will never be seen to advantage, or be worthily treated. In front of the tomb is a handsome pavilion of lofty pillars surmounted by nine small semi-circular domes. The vandal who whitewashed Ganj Buksh's tomb gave this also a good coating, and its removal should not be lost sight of when merciful remedies are undertaken at Sirkhej. The mosque consists of a domed colonnade, measuring about 200 feet by 80 feet, with a courtyard surrounded by a verandah to the east, measuring about 200 feet square. The pillars in the mosque itself are lofty and handsome, and the whole effect of the building would be stately and pleasing if the inevitable whitewash had not been liberally applied. It covers the columns of the verandah round the court and the columns of the building of the mosque itself, and should be taken off. A handsome pulpit, the king's seat, and the marble *mehrab* adorn the interior; but the raised gallery for the ladies of the palace has been looted of its screen-work.

29. *Tomb of Mahmud Begurra and his Queen Raj Bai at Sirkhej* (see No. 14 on plan).—These buildings overlook the large tank at Sirkhej, and are divided by a porch which is now disfigured by whitewash and blue paint. The tomb of Mahmud Begurra is a domed building surrounded with windows of stone trellis-work. It contains his tombstone and those of his sons, all of which are very handsome and of white marble. The floor of the building is of black and white marble, but no care is taken to keep the place clean, and the neglect and the whitewash which, as

elsewhere, is manifest, render the place unattractive in spite of its good design and ornamental details.

30. *The Tomb of Bibi Raj Bai at Sirkhej* (see No. 14 on plan).—This contains three tombstones handsomely carved, but the building is neither so large nor so well decorated as that of Mahmud; and, as far as I could ascertain, the interior columns and screen-work are of plaster.

31. *The Sirkhej Tank* (No. 14 on plan).—The walls of the various buildings require careful examination, and the numerous creepers and prolific vegetation which appear between the joints of the masonry should be utterly destroyed. The porch in the southern colonnade of the mosque of Ganj Bukh is particularly threatened with destructive overgrowth, and its great beauty demands that so simple a matter as the cutting out of roots should be undertaken without delay. The ruins of the palace, waste weir of the tank and supply sluice require periodical attention of the same kind; but there is a small mosque on the eastern side of the tank which is bricked up, neglected, and should be cleaned out.

32. *The Tomb of Azam Khan and Mozam Khan* (see No. 14a on plan).—This is a brick building on the road between Ahmedabad and Sirkhej, and is said to contain the remains of the two architects of Sirkhej. Its peculiarity lies in its great massiveness resembling the sloping bastioned architecture of Tughlukabad near Delhi.

33. *Syud Usman's Tomb and Mosque* [see sketch No. 4] (see No. 15 on plan).—On the opposite bank of the river Sabarmati, and about a mile from Ahmedabad, are the mosque and tomb of Syud Usman, which Mahmud Begurra built in A.D. 1460. The beautiful tomb building, although now so disgracefully neglected and maltreated, played a part when the subject of Indian architecture excited interest in Europe at the time of the Paris Exhibition of 1867; and the illustrations in Mr. Hope's Ahmedabad Book afforded to the British Commissioner suggestions for a building which had for exhibition purposes to be extremely open and airy.

34. It was mainly due to the attention given at this Exhibition by the Science and Art Department to the subjects of Indian architecture (by means of various illustrations and partly by photographs collected by Mr. Fergusson) that public interest awakened to the importance of collecting information on the subject. In fact, in 1868, at the instance of the Science and Art Department, a representation was made by the British Government to the Government of India to conserve and record the most remarkable of the ancient monuments throughout the whole country. Later on sanction was obtained to survey parties for Bengal, Madras, Bombay and the North-Western Provinces, which ultimately led to the appointment of Archaeological Surveyors under the Government of India and under the Governments of Madras and Bombay.

35. The tomb is 80 feet square, and the mode by which the central dome is supported on columns gives a picturesque variety to the interior, and renders the design altogether the most successful of all those to be seen in Ahmedabad. The interiors of both the large central and four smaller domes over the sides of the building are beautifully ornamented after the Jaina style, and are well worthy of illustration by drawing or photography. The columns are of a simple Hindu pattern, and their number and peculiar arrangement would give the interior an effect of propriety and dignity if the building was treated with any respect.

36. The adjoining mosque is remarkable for its minarets which, although of more than ordinary simplicity for Ahmedabad, are graceful in outline and effectively ornamented. Both mosque and tomb were during my late visit enclosed by a hedge

of thorns, the interior space being used as a cattleyard by a native cultivator who lived in the tomb, and had enclosed a corner of the building with mud walls. Cows were at an opposite corner surrounded with dung, straw and dirt. Piles of fodder filled up the space over the tombs; vegetation was destroying the roofs of both mosques and tomb. The marble mekrah of the former as well as its marble floor had been removed badly, and the whole place was a scene of greater desolation than I can describe. The obvious remedies are to clear the place of cultivator, cattle and jungle, and to put the two monuments in proper custody, and to repair the roofs which now leak violently. When this is done, the buildings should be fenced round with a simple iron railing to keep off cattle.

37. *Syud Alam's Mosque* (see No. 16 on plan).—In the north-west quarter of the city stands the mosque of Syud Alam. Built in Ahmed Shah's time, it is an early, although plain, example of how the style developed itself. Its plan and proportions are good, and all the columns and various parts of the structure were made expressly for it, and not taken out of a Hindu temple and adapted. The building was during my visit under repair by the Public Works Department.

38. *The Shahapur Mosque* (see No. 17 on plan).—This mosque is in the north of the city, and although small and unfinished, is one of the most ornate buildings in Ahmedabad. It was built in A.D. 1565, but the minarets were never completed. The tracery in their lower parts are most beautifully designed and executed. The frontage has a range of pointed arches, over which is an upper storey encircling the dome. The interior is partly whitewashed, and the building is dirtily kept, whilst the roof is covered with vegetation. All this might with propriety be remedied.

39. *The Achut Bibi Mosque* (see No. 18 on plan).—About a mile to the north of Ahmedabad is the tomb and enclosure of the wife of one of Ahmed Shah's Wazirs. The minarets which once adorned the entrances to the ground and the great archway of the mosque have been ruined, wholly in the first case, and partly in the second, by the earthquake of 1819.

The façade of the edifice is handsome, the carving of the lower parts of the minarets being most appropriately and elaborately ornamented. To restore the buildings would entail great cost, but to clear them of dirt and debris, and to arrest further decay by the removal of vegetation, and by stopping cracks in the masonry with cement, is a work worthy of being sanctioned, and for which the necessary expense would not be excessive. The buildings should be in custody.

40. *Darya Khan's Tomb* (see No. 19 on plan).—This simple and massively constructed building dates from A.D. 1453, and is near the Achut Bibi's mosque. Its dome is the largest in Guzerat, and entirely of brick. The walls and verandah are of the same material; but owing probably to the same earthquake that brought about the ruin of the Achut mosque, the verandah arches are badly cracked. The interior of the building is spacious and lofty, and a canopied tombstone occupies its centre. The place, which is very dirty, requires cleaning, and should be in suitable custody.

41. *Mia Khan Chisti's Mosque* (see No. 20 on plan).—This ornate building, erected in A.D. 1465, is near the Saharmati river, north of the city. Like other buildings of its class at Ahmedabad, it has two handsome minarets flanking a central arch. The railway officials have converted it into a residence.

42. *The Shahi Bagh* (see No. 21 on plan).—About a mile and a quarter north of Ahmedabad, and on the banks of the river, is the Shahi Bagh, or Royal Garden, built in 1622 by Shah Jahan, then Viceroy of Ahmedabad,

in order to give work during a famine. Mandchlo describes the Shahi Bagh as being in 1638 very large, shut in by a great wall with ditches full of water, a beautiful house and very rich rooms.

In 1666 Thavenot found the king's garden full of trees and the resort of all the young people of the city. The palace building is now used as a residence by the Assistant Judge. The flood of 1875 destroyed the garden beds.

43. *The Queen's Mosque in Mirzapur* (see No. 22 on plan).—Near the travellers' bungalow on the road to the Delhi gate is the Queen's mosque, built probably A.D. 1430—1440. The building is 105 feet long, 40 feet broad, and 32 feet high. It takes its names from two ladies of Ahmed Shah's household whose tombs are close by. One, Rupavati, was by birth a Hindu. The minarets, although broken by the earthquake in 1819, are the chief beauty of the mosque. Their bases are exceedingly elaborate and full of the most graceful foliated ornament. Projecting bracketed windows are another handsome feature in the façade. The tomb is a good looking building, and has been repaired by the Public Works Department. The central and four flanking domes are supported on columns, the whole being open on all four sides. The insides of the domes are richly fretted. The mosque is still under repair; but the work is incomplete, and the stone carvings would be much improved by cleaning. The censer and chain is a conspicuous ornament, and appears in the mehrabs of the west wall of the interior as well as in the minarets. *When the repairs are complete, the two buildings should be in custody.*

44. *The Shah Khub-ki-Masjid*.—This is a small building in the city near the main street, and close to a highly carved and picturesque wooden pigeon cot (see sketch No. 6). There are four ranges of eight columns, the façade being flanked by two thin minarets. *The rain leaks badly in the roof; this requires remedy, and the place should be cared for.*

45. *Kutub Shah's Mosque*.—This building is in the city on the road to and near the Delhi gate. It nearly escaped mutilation, because the municipality wanted to straighten the road! It was built by Kutub-ud-din in A.D. 1446, and has a façade of 5 arches, the central flanked, as usual, by minarets which have been clumsily repaired. The mehrab inside is of white marble well sculptured, the top being inlaid with colored marble. *The mosque is used for storing bales of cotton, so is the tomb close by—a proceeding which ought to be stopped, and a proper custodian placed in charge.*

46. *Muhafiz Khan's Mosque* [see sketch No. 5] (marked No. 25 on plan).—Muhafiz Khan's mosque is in the north division of the city, and was built in 1465. It has three ranges of arches flanked by minarets of great beauty in design and sculpture. The arches are edged with carved work, and above each arch is a small bracket window. The interior pillars support two domes, which are highly enriched. There is a gallery above filled with elaborate tracing. The pulpit and five mehrabs are elaborately carved, and the whole building is second to none in beauty. Repairs are being executed by the Public Works Department, and when completed the building should only be accessible through a proper and responsible custodian.

47. *Dada Hari's Well* (marked No. 26 on plan).—About a mile north-east of Ahmedabad is Dada Hari's well, built in A.D. 1485 by a lady of the household of Mahmud Begurra. At the ground level it is 196 feet long and 40 wide. It is a singularly beautiful architectural work, and the second best of

its kind in Guzerat. The finest is at a place called Adalaj near Ahmedabad. The structure consists of flights of steps and galleries descending to the water. These are ornamented with columns and niches highly carved, and the effect of the vista from one end to the other of the Baori is most picturesque. *The place is now much neglected. The well itself wants cleaning as the water gets fouled, and vegetation should be removed from the masonry walls.*

48. *Minarets of a Mosque at the Railway Station* (marked No. 27 on plan).—These minarets are the tallest in Ahmedabad, but all traces of the mosque and of its history are for the time lost; the lower parts of the towers are damaged, and the repair of them by the railway authorities would be a graceful act.

49. I was unable to see the following buildings, but hope to visit Ahmedabad again in a short time :—

	No. on the Plan.
Malik Alam's Mosque	(28)
Butwa	(29)
Queen's Mosque in Sarangpur	(30)
Mosque of Muhammad Ghaus	(31)
Mir Abu Turab's Tomb	(32)
Baba Lului's Mosque	(33)
Tombs of the Dutch	(34)
Shah Wajih-ul-din's Tomb	(35)
The Svami Narayan Temple	(36)
Hastings Temple	(37)

50. One of the best features of Ahmedabad is its domestic architecture.

The town is full of highly carved wooden house fronts, small temples, pigeon houses and the like, which for variety and picturesque beauty cannot be surpassed by the best specimens of wooden architecture in Normandy and Cheshire (see sketch No. 6). *I venture to suggest that estimates for the various restorations and repairs here recommended be called for, and that a requisite number of custodians be appointed to take charge of the buildings specified.*

51. *Rock-cut Temple near Ganesh Khind, Poona* (see diagram).—On the road to the Ganesh Khind and a little to the west is a curious temple to Shiva. Mr. Fergusson says of it :—

"One more illustration must conclude what we have at present to say of Hindu rock-cut temples. It is found near Poona and is very little known, though much more appropriate to cave architecture than most examples of its class. The temple itself is a pillared hall with apparently ten pillars in front, and probably had originally a structural Sikra built on the upper plateau to mark the position of the sanctuary. The most original part of it is the Nandi pavilion, which stands in the courtyard in front of the temple. It is circular in plan, and its roof, which is a great slab of rock, is supported by apparently sixteen square pillars of very simple form."—(See page 447 of *History of Indian and Eastern Architecture*.)

The illustration in Fergusson's book gives an impression of much greater size than is actually the case, and being thus prepared, I at first found some difficulty in identifying the place.

The circular mandapam is of solid stone, but four columns have fallen. The resident Brahmins called the temples "Panch Panduaki Dewal." The fallen stonework could be reset at a moderate cost.

52. *Temple of Parvati, Poona.*—Picturesquely situated on a hill south of the city of Poona is the temple of Parvati, built by the Peshwa Balaji Baji Rao in A.D. 1749. As an example of architecture of this date the building is not without interest, and should ultimately find a place among illustrations of Indian architecture. It has an endowment of Rs. 1,500, and seems to be in fair order.

53. *Karli Caves* (see sketch).—Karli is a small railway station on the way from Poona to Khandala. The caves are on a hill about two miles north of the station. Full description is given in *Cave Temples of India* by Ferguson and Burgess. The ascent to the great cave is very steep, and rises 600 feet above the plain. At the foot of the hill is a small village called Vihergrang—meaning probably the "village of the Viharas," and thus bearing collateral testimony to the Buddhist origin of the caves. It is generally agreed that the age of the Karli Cave is antecedent to the Christian era. It is the largest Chaitya cave in India, its interior dimensions being 124 feet 3 inches long by 45 feet 6 inches; the width of the centre aisle is 25 feet 7 inches (see diagram taken from Ferguson's *History of Indian and Eastern Architecture*). The wooden ribs of the roof remain entire, and the circular screen of wood filling up a portion of the great arch in front has been replaced (over A). The columns of the central aisle have elaborate capitals, and the walls of the vestibule at A-B are decorated with bas-relief of figures and subjects. The temple to the goddess Bhawani at the entrance (C) has a hideous roof of sheet-iron. The horse-shoe arch at A has been bricked up and fitted with an unsightly doorframe and door, whereas a simple iron bar gate would answer the purpose better and not interfere with appearances.

The Buddhist Dagoba inside the temple at B has been coloured by the Hindus, who worship it as a lingam; but they have no business in the place, and ought to be prevented from using paint and whitewash on the walls and sculptures. The lighting of cooking fires in the cave should also be stopped. Whitewash and paint should be removed, and the temple delivered over to a custodian. The rock above the Bhawani temple at C is cracked, and the dangerous piece should be removed. A pipal tree, which has struck root at the same place, should also be eradicated. The caves of Bhaja and Bedsa are near Karli, the former 2 miles south of Karli, and the latter 5½ miles east of Bhaja.

54. *Ambarnath.*—Four and a half miles from Kalyan junction on the Great Indian Peninsula Railway is the temple of Ambarnath in a pretty valley on the edge of the river Wadhwan. The temple, Mr. Burgess says, dates from A.D. 1089, and is an interesting example of Hindu architecture. Although in a ruinous state, it is still of great beauty. Casts and drawings were made in 1865 by the Superintendent of the School of Art, Bombay; and as far as illustration is concerned, all that is necessary has been done, provided the illustrations are still available. The temple is dedicated to Shiva, and is wholly of stone; it measures 87½ feet from east to west and 58 feet from north to south. The sanctum is reached by steps, and the roof over it has fallen in. The body of the temple, i.e., the adytum, is very fine; the columns are elaborately sculptured, and the construction of the roof is massive. The side aisles of the adytum are coved and the lintels between columns are in many places dangerously broken. There are porches on the north, south and west sides, all very elaborate in design and execution. The exterior of the temple is as rich in ornament as the interior. *The pipal trees in the roof should be outrooted. An enclosing wall with cells formerly surrounded the building; now only part remains, and the enclosed space is*

strewn with carved stone fragments. These should be collected so as to be seen, and the whole area cleaned up. The interior of the temple should be made secure by strengthening the broken stone-work with iron cramps, and the roofs should be rendered impervious to rain by filling in the cracks with cement. The place should be in custody, and it would facilitate this if a rough stone wall could be built round the edifice to keep off intruders.

55. *Caves of Elephanta.*—These caves are in the charge of Lieutenant W. W. Robinson, R.E., Executive Engineer of the Bombay Defences, who accompanied me to see them in March last. His predecessor, Captain Haydon, R.E., obtained the necessary sanction for a resident custodian, who keeps them clean and receives the fees paid by visitors. The place is consequently better cared for than any of its class in India. Mr. Burgess, Archaeological Surveyor of Bombay, has published an account of the caves, which are therefore well known and frequently visited. The fees paid by visitors more than cover the expense of care and custody.

Note on Works undertaken in the Bombay Presidency, dated 14th September 1882.

1. I find from a Minute on the restoration of ancient buildings by Mr. J. Gibbs, dated Bombay, September 1878, that in 1856 Government, at the recommendation of Sir Bartle Frere, sanctioned a proposal of Mr. Gibbs, when Assistant Commissioner in Sind, for the repairs of the Jama Masjid at Tatta and tombs on the Makli hill, and contributed Rs. 5,000 towards the former, which was supplemented by the Syads who had charge of the mosque with a similar sum, and Rs. 2,500 towards the latter. In 1867 a sum of Rs. 3,300 for the Shah Alum Roza and Rs. 5,000 for the buildings at Sirkhej, Ahmedabad, were sanctioned. In 1869 and 1870 Rs. 5,000 were sanctioned towards the repairs of the palace, harem and tank at Sirkhej, and in 1871 and 1872 upwards of Rs. 2,000 were expended on the Roza of Rani Sipri on the Astoria road, Ahmedabad.

2. The late Major Mant, &c., was appointed Conservator of the Archaeological and Architectural Remains in the Bombay Presidency on the 7th September 1878, and in July 1879 inspected and reported on the buildings at Ahmedabad.

3. My reports on Bijapur, Ahmedabad, Karli, Ambarnath, and Elephanta were submitted last year to the Bombay Government. The conversion of the Bijapur city into a head-quarter for the Kaladgi district promises to be one of the most important of measures in the scheme for preserving national monuments. The estimate for the whole project does not include special repairs to the architectural buildings, which I hope will be thoroughly carried out.

Elephanta.

4. The caves at Elephanta have been cleaned up under Captain Robinson, &c.

5. The fine ruined and deserted temple at Ambarnath is about to be attended to. Repairs based on the proposals of

Ambarnath.

Mr. W. B. Mulock, Collector of Thana, amounting to Rs. 586, have been sanctioned, and an estimate is under preparation for the rebuilding of the upper portion of the walls of the sanctum and tower of the temple.

6. Mr. Mulock has made some suggestions in respect of the (1) Bassein Fort and its large ruins; (2) the Kanheri caves in

Mr. Mulock's suggestion.

Salsette; (3) the Kondane caves below Rajmachi Fort in the Ghor Ghat ravine; and (4) an old temple to Mahadeo in the Inam village of Lonad.

He writes as follows to the Bombay Government:—

"Regarding the former (Bassein Fort) in 1860, Government granted a lease for 20 years to a Major Littlewood, which is now in the hands of his widow Mrs. Littlewood. The lease expires in 1890, and on its expiration, I am strongly of opinion it should not be renewed, as Mrs. Littlewood is constantly making claims to trees, &c., within the Fort; and while thus occupied by a lessee, it is impossible to effectively ensure the protection of the ruins.

"The Kanheri caves should have a custodian like the Elephanta caves, who would keep them clean and reside among them. A few years ago some visitors to the caves were horrified by finding a corpse hanging from a Dagheba in one of the principal caves. The deceased had, it seemed from police inquiries, committed suicide.

"The Konkan caves were handed over to the Forest Department, but I don't believe a forest officer or sepoy has visited them since the issue of the Government Resolution No. 505, dated 22nd February 1877. The caves should be handed over to the patel of the village, who should be made responsible for its care. The Mahadeo temple at Lonad was reported on by Mr. Sinclair's Indian Antiquities, IV, 68. When I saw it a few days ago, a number of rice straw racks were heaped up around it, which, if they caught fire, would have irretrievably destroyed these beautiful and valuable old remains. In my opinion a sacred hedge should be planted round this also, as I suggested for Ambernath, and the patel should be answerable that no further injury is done. The beautifully carved stone lying about should be collected, and placed within the enclosure also. Regarding all the above, I think the respective patels and talatis should make an annual report on the state of the ruins, and the munsheedar or his first or district karkun should once a year visit each and submit the patel's and talat's reports, with his own remarks thereon, to the Collector. The due supervision of these ruins would then be ensured."

I hope soon to visit the buildings.

7. With respect to the Karli caves, an estimate has been sanctioned for providing iron gates to the caves, and for removing old masonry from the archway. The question of cleaning up the old Buddhist carvings and the interior of the cave has been the subject of some correspondence; and the question is, as far as I am aware, unsettled at the present moment.

Some repairs to the monuments and mosques at Ahmedabad are this year provided for, but I hope that the Bombay Government will cause the work to be thoroughly carried out. An Imperial grant-in-aid will be given.

Mr. W. Woodward, Collector of the Panch Mahals, has invited my attention to the ancient buildings on the Pawagar hill, and I hope to visit the locality before long.

Pawagar.

Q

Note on Preservation of Monuments in Bengal, dated 17th September 1882.

Sir Ashley Eden in 1880 ordered the Great Temple at Buddha Gya to be repaired; this was before I was in a position to give any advice, but I visited the building in March last, and submitted the following observations to the Government of Bengal in a letter dated 23rd June 1882:—

"I have the honour to submit the following suggestions and remarks on the restoration works at Buddha Gya, visited by me on the 7th March last.

"2. These works were commenced before the establishment of my department, and not having seen the great temple previous to Mr. Beglar's operations, my knowledge of its former condition is confined to the descriptions and illustrations in Mr. Fergusson's *History of India and Eastern Architecture*, and in Rajendra Ball Mitter's volume on Buddha Gya. Looking, however, to the character of the masonry, which I examined in company with Mr. Beglar, and which is merely a mass of mud and brick, and considering that the original surface protection was nothing but plaster, I do not see how the security of the building could have been provided for in any other way than that carried out under Mr. Beglar. The careful renewal of the exterior plaster envelope on the old architectural lines seems to be the only manner of successfully conserving such a building; and although the cost has been considerable, the great historical value of this relic of Buddhism, in my opinion, fully justifies a large outlay.

"3. If too much has been done anywhere, it is in the votive buildings which surround the temple; but I hesitate to criticise where my previous knowledge of the condition of these particular monuments is so meagre. There are, however, three important points to which I respectfully invite the attention of the Bengal Government:—

- (i) The advisability of completing a series of photographic views of the buildings, showing all the various stages of disrepair, progress, and completion, accompanied by carefully measured plans.
- (ii) Provision of permanent custody of the buildings, to prevent their being misappropriated by the natives.
- (iii) The disposal of many hundred small stone fragments and votive offerings collected by Mr. Beglar.

"4. In reference to illustrations, Mr. Beglar's photographs already furnish much information; but I suggest that completion photographs be taken, and plans be made to show the former and present state of the monuments. These would, I submit, furnish an important memoir of Buddha Gya, and be worthy of publication.

"5. As regards custody, the large expenditure of money will be of little avail if the structures are left to the mercy of the natives. I would suggest walling in the site, to prevent trespass of cattle and idlers; and that a permanent and responsible custodian be appointed under the Magistrate of Gya, as soon as Mr. Beglar is ready to make over charge of the buildings.

"6. So many of the votive totes and stone fragments are mere duplicates that there could be no object in retaining them all on the spot. I would therefore

recommend the Bengal Government to authorise Mr. Beglar to select those which should be kept *in situ*, and to make up collections for presentation to the following institutions:—

The Imperial Museum, Calcutta.	|	The Museum at Bombay.
The Central Museum, Madras.		The Museum at Jaipur, Rajputana.
The Museum at Lahore.		The Playre Museum, Rangoon."

2. Mr. Beglar informs me that he has drawn up a report and estimate on the preservation of Shīr Shah's tomb at Sasseram, and that he has taken in hand the security of the roofs and domes of the building. I have not yet been able to visit Sasseram, but hope to do so shortly, and that provision for completing the repairs will be forthcoming.

3. Sir Ashley Eden invited my attention in February 1882 to the temples in Orissa. These and other buildings in Bengal will be reported on in due course.

R

Reports on Central India Monuments, together with a Note on Works undertaken.

Gwalior.

1st January 1881.

I visited Gwalior during November. Until quite recently, Gwalior has been an out-of-the-way city. The old mail road between Agra and Bombay passed at too great a distance from the fortress to make a visit convenient to travellers, and the place was rarely seen except by those whose duties located them at Morar, or by an occasional tourist. The railway now brings Gwalior within 7 hours of Agra, and on completion of the bridge over the Chambal the journey will be reduced to 4 hours. Eventually the line of railway will run through to Hoshangabad and be the main artery across Central India. Gwalior will therefore soon have many more visitors than formerly was the case, and any steps taken by Government to preserve the fine monuments in and about the fortress will be highly appreciated. I regret to have to record that travellers often remove stone carvings, pieces of colored tile-work, or any fragmentary relic that they can carry off. Officers, besides travellers, have been the cause of even greater vandalism. Whole columns were some years ago removed from the fortress to adorn gardens in Morar, and some stones found their way to greater distances beyond. This, however, is being rectified, as my letter to Colonel Osborne, the Political Agent at Gwalior, quoted below* will show. The present General Commanding at Morar, General Gordon, takes considerable interest in the fortress, and I have no doubt that he would find it possible to provide a custodian for the monuments in the fort, and that his example would be followed by his successors. Nothing should be damaged, nothing removed.

* Letter to Colonel Willsingham Osborne, dated Gwalior, 19th November 1880.—“I have made an examination of the monuments and buildings of interest in the Gwalior Fort, and see how very large is the field for doing very creditable work towards preserving them.

With the advantage of Captain Keith's experience I have seen all that is of greatest interest, and have examined the two Saa Bahu temples, the Teli-ka-Mandir, the small Jain temple beyond, and the palaces known as the Shahi Jahani, the Jahangiri, the Karan Mandir, the Vikramaditya, the Man Mandir, and the Gajari Mahal.

Besides these, there are scattered all over the fort many interesting carved fragments of buildings which are no longer standing. The debris composed of these forms a thick covering from one end of the fort to the other, and I feel convinced that a large mass of matter interesting and valuable as artistic records of the past lie buried many feet under the ground. To undertake a systematic restoration or repair of the wonderful buildings in the fortress is out of the question on account of the great cost which would be involved, and also because in a great number of cases there is no evidence as to the plan and character of the buildings which formerly existed. A great deal may, however, be accomplished by carrying on what Captain Keith has already started. He has, with the aid, I understand, of a Committee composed of yourself, General Gordon, Major Crewey, R.E., and the liberal grant of Rs. 1,000 from Government Funds, been able to rescue the Teli-ka-Mandir from ill-treatment as a soldiers' coffee-shop, and the proposal of the Committee to convert this building into a kind of museum for carved fragments of stonework seems to me to be worthy of all encouragement and help. I venture to suggest to you that the Government of India should be asked by the Agent General for Central India to grant a sum of Rs. 5,000 for—

- (1) the removal of carved pillars and stone fragments from the debris which surrounds so many buildings in the fort;
- (2) for the collection of these carved stones at the Teli-ka-Mandir;
- (3) for cleaning the magnificent stone carvings of the temples called the—
Saa Bahu, Teli-ka-Mandir,
and for the removal from them of the plaster put on by the Muhammadans, and for the cutting away of destructive vegetation;
- (4) for the removal of the coats of whitewash which now cover the carved trellis and carved work of the courts in the Mandir palaces.

As regards the custody of the buildings outside the fortress, His Highness the Maharaja would doubtless carry out any recommendation made by the Political Agent at Gwalior for prevention of damage and for keeping them clean. The buildings, &c., of interest at Gwalior are—

FORTRESS.

Gates.

1. Alamgiri Gate.—1600 A.D.
2. Hindola Gate.—1479-1516 A.D.
3. Bhairon Gate.
4. Ganes Gate.—1421-1454 A.D.
5. Lakshman Gate.—970 A.D. (and rock-cut temple).
6. Hathiya Gate.—1486-1516 A.D.
7. Hawa Gate.

Palaces.

1. Shah Jahani.
2. Juhangiri.
3. Karan Mandir.—1454-1479 A.D.
4. Vikramaditya.—1516 A.D.
5. Man Mandir, Man Singh's Palace.—1486-1516 A.D.
6. Gujari Mahal.—1516 A.D.

Temples.

- Teli Mandir.
Sas Bahu (two temples).
Jaina Temples.

On the sides of the Rock of Gwalior—inside and outside the Fort—rock sculptures of Jain figures.

OUTSIDE THE FORTRESS.

Tomb of Muhammad Ghana, built in the early part of Akbar's reign.
Jama Masjid near the Alamgiri Gate.—1605 A.D.
Muhammadan tombs near the north end of the fort.

Plans of almost all these have been made by General Cunningham—see Vol. II of his Report, chapter XVI; but I propose to put in hand drawings showing in greater detail the beautiful ornamentation of the best parts of the palaces and of the temples.

If to this sum His Highness the Maharaja of Scindia would add something more, he would be aiding in a noble work and giving assistance to the preservation of works of high artistic interest in his own territories.

The Tomb of Muhammad Ghana in the old city of Gwalior is sadly in need of cleansing and repair to the beautiful screen-work which renders that building so attractive and remarkable. This, however, is clearly a work which could only be done with the aid and practical assistance of His Highness the Maharaja. As Captain Keith takes so enthusiastic an interest in all that concerns Gwalior, and has already begun to collect stone carvings for the proposed museum at the Telika-Mandir, I think that he is retiring the most fit officer to be entrusted with the carrying out of the work. I understand that he is retiring from the Army; his services could therefore become available, and I would suggest, if the grant is sanctioned for the works specified, that he should be engaged to carry them out for a limited period of six months from the 1st January next at Rs. 250 per mensem, working in concert with the Committee already formed for the proposed museum and submitting his accounts to me. I too should always be ready to give him any advice and assistance either personally or with the draftsman which with the consent of the Agent General and the General Commanding I propose shortly to depute to the Fort for the purpose of making drawings and illustrations of the best portions of the buildings.

His Highness the Maharaja of Scindia has within his territories many fine ruins of great artistic beauty, and isolated fragments of carvings (that could not be replaced in their buildings) might be collected and arranged in a museum at Gwalior, and form the nucleus for a school of Oriental art and architecture. An institution of the kind would enable the Maharaja to patronise good art.

He has already erected one huge palace of modern Italian architecture, and has nearly completed a second building which is in a very debased native style. During my recent visit to Gwalior I went over this new edifice. The best feature of the exterior is a colonnade, circular in plan, with some elaborate and well carved stone pillars and spandrels. These are being painted over in oil color a dark brown and picked out in bright reds and blues!

The interior reception and other rooms are being gaudily decorated in fresco arabesques. The head painter, who hails from Nagpore, is very clever with his brush as far as ornamental drawing goes, but has little idea of harmonising and toning down his colors.

He took me with great pride into one of the rooms to see his *chef d'œuvre*—a decorated pilaster, the lower panel of which contains a copy of a coloured photograph of Lydia Thompson in satin tights!

Extract from a letter from CAPTAIN H. H. COLE, R.E., Curator of Ancient Monuments in India, to the Agent to the Governor General, Central India, Indore, dated Simla, the 3rd August 1881.

I have the honour to inform you that I have recently visited Gwalior and have seen the work being carried on by Major Keith in the fortress. The cleaning of the sculptures in the fine temples, the Teli-ka-Mandir, and the two Sas Bahu is highly satisfactory, and Major Keith has by untiring supervision accomplished considerable and most creditable results at small cost. I have received a copy of his preliminary report, but I have suggested to Major Keith the propriety of drawing out a detailed report of the work that has been done and is in hand; also that he should compile a list of all buildings, caves, and sculptures worthy of being preserved, adding any observations of his own on the peculiarities of the varieties of art exemplified in the fortress. This report is being printed.

2. The work of clearing out the Man Mandir Palace has not yet been commenced, but I understand that the commissariat stores can be transferred to the old magazine or some other vacant building of no architectural importance; but I would suggest that an early application be made to the military authorities for the immediate handing over of the Man Mandir Palace to Major Keith, in order that the fine courts and apartments may be cleaned and the whitewash removed from the masonry walls, trellis work, and sculptured ornaments. Major Keith has a good deal more work to do in connection with the work specified in the enclosed report, for which Rs. 5,000 was sanctioned.

* * * * *

4. The fine old tomb of Muhammad Ghans in the old city is much in need of repair and clearing out, and the chuttries of maharaja's ancestors in the new city, although of considerable beauty, have been obscured by repeated coats of whitewash. Many of the picturesque balconies and windows of the city houses are spoilt by whitewash, the prohibition and removal of which from stone trellis work of any kind is very advisable.

* I. Daulat Ram, dating about 1811.

II. Jangaj Ram, dating about 1840.

III. Patel Sahib, dating about 1890.

5. On the south-east face of the fortress is a group of caves containing some very interesting Jaina statues and sculptures; some are closed in by huts occupied by natives and cattle. It would be of advantage to clear the place of all such dwellings. The Urwahi valley in the fort has a large number of similar Jaina caves and sculptures, and large masses of debris obscure their bases. * * *

Extract from a letter from CAPTAIN H. B. COLE, R.E., Curator of Ancient Monuments in India, to Sir LAURENCE GRIFFIN, K.C.S.I., Agent to the Governor General for Central India, Indore, dated Simla, the 31st October 1881.

2. In regard to the further employment of Major Keith, I would suggest that an application be addressed to the Government of India for his services for one year from the 14th March next, in order that he may superintend

Copy enclosed.

the completion of the work to be done at Sanchi, as detailed in my report of the 10th January last, and in order that he may carry out the preservative measures at Mandu, recommended in my report of the 5th January.

Copy enclosed.

3. If this can be arranged, it would, I suggest, be better for Major Keith to utilise the cooler seasons at Sanchi and Mandu, where he must be under canvas, and to return to his Gwalior work in the hot weather, when he cannot be in camp. It would, I submit, be a good plan to send a Public Works subordinate, who is a good draftsman, to work under Major Keith at Gwalior.

4. As regards Sanchi, I venture to repeat my suggestion that an Engineer be employed to rebuild the fallen gateways, working in communication with Major Keith, and that photographs be taken when the work is completed.

5. In reference to Mandu, the survey referred to in my report of the 5th January is complete; and a copy attached shows what jungle and vegetation should be cleared away.

6. If a further grant is required for the Sanchi work, I would suggest that application be at once made to the Government of India.

7. For Mandu, I would recommend an application for a grant of Rs. 2,000.

Sanchi Kanakhera in Bhopal.

10th January 1881.

I visited Sanchi on the 27th November 1880, and remained there some days in camp. A survey has been made of the hill on which the Buddhist tope and other monuments are; and this plan serves as a record of their present state, and shows what should be done in the way of clearing away overgrowth and trees.

I am indebted to Captain Bell, R.E., V.C., for the permission which was given to have the plan and key-drawings of the fallen gateways reproduced at the Intelligence Branch of the Quarter Master General's Office at Simla.

The jungle has increased very much since I was making casts in 1869, and great damage has been done by the spreading of roots and branches of trees to the railing round the great tope. The opening made in this tope in 1822 is now overgrown with creepers, and they are forcing out the masonry face work which covers the hemispherical mound. The railing on the south has completely fallen

and natives have been recently mutilating the carvings on the eastern gateway. They have also cut up one of the pillars (at H) (erected by Asoka over 2,000 years ago)—for grindstones.

As regards *custody*, it is absolutely necessary for a trustworthy watchman to be always on the spot in order to prevent such wilful damage. The remains at Sanchi are second to none for their importance as evidences of early Buddhist history, religion and art, and it is worth the wages of three or four native custodians to ensure that damage goes no further, more particularly as the Bhopal State Railway will pass near Sanchi on its way to Bhilsa and make the place much more accessible.

The plan of the hill shows the position of all the *topes*, buildings, gateways, &c., and of all the fallen masonry on which there are valuable inscriptions and carvings. As a temporary measure, I have had the important fallen stonework numbered and the small fragments have been collected near the northern gateway.

The first work is to thoroughly clear away and outroot the trees and overgrowth shown in the areas colored green on the plan. Great care must be taken to destroy the roots, particularly in the surface masonry of the Great *Tope*.

I think that the roots of the tree behind the northern gateway should be examined, and if they are doing or likely to do harm to either the *tope*, the gateway, or the railing, it should be carefully felled and the roots dug out. If not, it might remain, as it rather adds to than detracts from the picturesque appearance of the place.

In removing the jungle not more should be cut away than actually threatens damage to the masonry structures.

The breach in the *tope* at the south-west should be filled up and the facing stones relaid.

As regards the *restoration* of stones to their former positions, a great deal may be done to immense advantage. The railing which once surmounted the hemisphere of the *tope* has a few pieces on the *tope*, and many lie below between the *tope* and its surrounding railing. These should be first collected on the top and then, as far as possible, pieced together.

All the carved fragments behind the stone railing and the *tope* (excepting the figures of Buddha, which are still erect) should be removed to the open spot in front of the northern gate, where they can be well seen.

The *northern gate* is in fair condition. The capital of the Asoka pillar lying near it (105, 105a, 106) should be set up (at G) with the statue, the pieces of the broken pillar collected and examined for any inscription.

The *western gate* is much ruined. One column and dwarf capital is still erect but the other parts of the gate are on the ground and all three architraves broken two in two pieces the third in three pieces. The small Lion capital with a broken wheel lies near the fallen portion of the gate, and rested formerly on the uppermost architrave, in which there is a slot for the purpose.

The *south gate* is also much ruined; both lion-headed columns are down and broken. The uppermost architrave is broken in two, the two others broken in three pieces.

An Asoka *Lât* of about three feet diameter lies on one side much broken, and near it a fine Lion capital.

The *eastern gateway*, a cast of which I made in 1869, underwent (for the purpose of obtaining clear moulds) a thorough cleaning, and the sculptures are much improved. The railing at the back of the gate requires setting up. In front of the gate are two broken Asoka columns; the Lion capital which lies near should be set up.

The rebuilding of the fallen railing of the top and the *western and southern gateways* will require the superintendence of an engineer and the use of strong lifting apparatus. It might perhaps be possible to obtain the services of an officer from the Bhopal State Railway for the purpose, and I strongly recommend that immediate steps be taken.

The accompanying key plans of the south-west and small gate show what has to be done.

I understand from Major Prideaux, the late Political Agent at Bhopal, that he had arranged with Mr. Mears, the headmaster of the school at Seboze, to superintend the cutting away of the jungle, and he could do everything except the rebuilding of the fallen gates. It would not be difficult to clean the sculptures of the northern gate. A strong solution of soft soap and water is applied to the stone surface, and the lichen and plaster which now covers the carvings made thoroughly soft. It can then be removed with an iron point, and the whole scrubbed out with a hard brush, (made by beating the end of a small bamboo into fibre.) A mason and four natives could clean the northern gate in a few weeks.

Besides the Great Toppe there are several other interesting and artistic monuments and buildings on the Sanchi hill. The buildings should be cleaned out, the debris removed and carved stones taken out and placed so as to be easily inspected.

The clearing of jungle, &c., should be put in hand as soon as practicable, and an engineer detailed to estimate the cost of rebuilding the fallen gates. The two thousand rupees sanctioned by the Government of India will not suffice for completing both these works, but Her Highness the Begum of Bhopal has offered, I understand, to render assistance in the way of labour, and this will lessen the expenditure; if, however, a supplementary grant is necessary, I hope that the Government of India will be disposed to sanction any further sum.

Mandu in Malwa.

5th January 1881.

Mandu is reached from Mhow via Dhar; there is a good metalled road the whole way; total distance about 50 miles. The Mandu buildings are described in Fergusson's *Indian Architecture*, page 540; and the Maharaja of Dhar has defrayed the cost of republishing a short history of Mandu by "A BOMBAY SUBALTERN," which appeared in 1844. The site on which the city of Mandu is placed is about 1,944 feet above the sea, and rises 1,200 feet abruptly above the plains to the south. The view is splendid, and the position of the hill made it a formidable stronghold, which the Hindus retained until driven out by the Muhammadans, who created there an independent Moslem principality up to 1568 A.D., when Akbar annexed it to his dominions.

Sultan Hoshang Gheri, who governed Malwa from 1405 to 1432 A.D., erected all the finest of the Mandu buildings, the present condition of which I will presently describe. When the Marhattas conquered Malwa in 1732, Mandu, ceasing to be an important city, was deserted, and left to the tender mercies of the vegetation which has covered the whole hill and enveloped the mosques and palaces. The roots of poplar trees show a preference for walls and domes. They force out the stone work in every direction, whilst the *karai* and *chikara* trees undermine and bulge out massive blocks of masonry and cause their overthrow.

The Maharaja of Dhar has, however, taken steps to preserve the fine monuments of Mandu, and is putting some of the best in repair. More must, however, be done before these magnificent national buildings are rescued from the powerful and prolific vegetation which continues to threaten their destruction. I propose to have a complete survey made of the following structures, and to illustrate their architecture by plans, drawings, and details.

- (1) *Rup Mati Palace*.—Vegetation in the roof and walls requires weeding out and the roots removed.

The lower parts of the building are used as dwellings.

- (2) *Baz Bahadur ki Mahal*.—The jungle outside this building is very bad. The pipal roots have forced their snake-like lengths into walls and domes.

The court-yards require cleaning and clearing of weeds.

The colonnades are used by cattle, and the interior vaulting blackened by smoke and bats.

- (3) *Jama Masjid*.—A fine massive building. The east colonnade is almost ruined, and the colonnades on the north and south are badly ruined. The domes over the mosque are covered with vegetation.

The pulpit inside and the niches or "mehrabs" require clearing. They are particularly remarkable and handsome.

The whole place requires vigorous attention in the way of clearing and repair.

The Maharaja's workmen had begun to cut away jungle here, and to execute some small repairs when I visited Mandu.

- (4) *Tomb of Sultan Hoshang Shah*.—A handsome massive marble building. The Maharaja is beginning to repair it; the interior is in fair condition, and the tombstone handsomely carved. Beyond the enclosure of the tomb is a curious vaulted corridor.

- (5) *Hindola Mahal*.
 - (6) *Chauva Baoli*.
 - (7) *Jahaz Mahal*.
 - (8) *Taweli Mahal*.
- }—A collection of palace buildings, but very much ruined.

The Hindola Mahal is very massive and of singular design. The roof has fallen in and the walls much covered by vegetation.

The Jahaz Mahal is used as an elephant stable, and the Taweli Mahal is occupied by Bhils.

- (9) *Chota Jama Masjid*.—Is a remarkable building, having been constructed out of the materials of a Jain temple.

It requires much attention in the way of clearing weeds and vegetation.

The colonnades of Jain column resemble those at the Kutb, and are very handsome.

When a general survey has been made of the ruins, the amount of jungle to be cleared can be indicated, and the Maharaja might be asked to undertake to have the work done, and to take simple, but effective, measures for preventing the buildings from falling to the ground.

Near Naleha, which is between Mandu and Dhar, is a ruined Muhammadan building which Sir Thomas Malcolm converted into a residence. At present it is occupied by Bhils.

Dhar.

The capital of Malwa was formerly Dhar—an old Hindu city, some 23 miles north of Mandu; but nothing remains of its greatness, except two remarkable mosques erected out of Jaina remains.

The Kaimal Moola or Jama Masjid has a quadrangle of fine Jain columns, and the domes over the mosque are very fine and elaborate, similar to those in the temples at Mount Abu.

The floor of the mosque is of black stone slabs, from which Sanskrit inscriptions have been effaced. The niches and the pulpit are handsome. Two of the columns supporting the central dome of the mosque have on them a couple of inscribed Sanskrit grammar devices, which show that they were probably part of a scholastic building.

The Lath Masjid.—So named from an iron column which lies in front of it*—is a similar building to the Jama Masjid, but the Jain columns are not so elaborate. The niches or mehrabs and the pulpit are very good. Both these buildings are worthy of illustration, and should be cleaned out and the vegetation removed from the courtyards and from the roofs and domes. This the Maharaja would no doubt cause to be done, if asked.

Both these mosques have Arabic inscriptions over their entrances; and the Judge of the Sudder Court at Dhar has kindly promised to get them copied for me.

Ujain (Malwa).

6th January 1881.

The country of Malwa before the Muhammadan conquest was governed by independent Hindu Rajas. Vieramaditya is said to have flourished about the beginning of the Christian era, and to have founded the city of Ujain, which became a focus of the arts and literature of the Hindus. The ancient city has long since disappeared, but I visited a temple dedicated to Mahadeo,† which is near the site of the old Ujain, and an investigation might result in the discovery of inscriptions. The building is partly earthed up, but still used for worship; its columns are all of a primitive shape, and have the appearance of being very ancient. Drawings would be interesting.

The modern city of Ujain is very picturesque, and has a handsome street of carved wooden houses, one of them being a palace of the Maharaja Scindia.

Drawings of these wooden façades would be an interesting addition to our knowledge of Indian art.

Water Palace near Ujain.—This remarkable Muhammadan residence, which I visited on the 19th December last, is situated on a rocky island in the middle of the Sipri river, about 6 miles to the east of modern Ujain. It is said to have been built by Sultan Naur-ud-din (1500-1512 A.D.), and is described in the History of Mandu

* This iron column is 9 inches square and has a number of holes through it. Other pieces similar to it are close to the *Rindola Mahal* at Mandu and in front of the Agency Bungalow at Dhar, and I suspect that Mr. Ferguson's surmise (see page 241, of his *History of Indian Architecture*) that it was used for some constructive purpose is correct. The *Rindola Mahal* takes its name from *Rindola*—a swing—and this iron bar may possibly have been used for such a purpose.

† Called locally Bhilari Kufar; it is near the Sipri river, about a mile east of modern Ujain.

by "A BOMBAY SURVEYOR," originally published in 1844, and now reprinted by the Maharaja of Dhar. He writes: "The apartments of the palace on the ground floor, eight or nine in number, are lofty and commodious; on the terrace above are several airy chambers and two cupolas, which latter surmount the two principal of the lower apartments."

"Connecting this island with the northern bank there is a stone bridge, below which to the eastward is a causeway composed of slabs of stone and intersected by numerous watercourses, some of which are of spiral form. * * *

In different parts of the causeway are bowers and alooves, with streams of water passing through the centre, several of the streams running evenly along and then gliding down sloping watercourses: at the extremity of the causeway are some apartments on a level with the bed of the river, but below the surface of the causeway: from these small apartments you see in front a sheet of water falling from above. * * * The bridge and parts of the causeway are built up of the remains of a Hindu temple; carved fragments appear in several places; and as the place is known as "Kali-Jaggah-Mahal, or "Kalidoh," the building may have been erected out of the materials of a temple dedicated to "Kali Devi." The building is certainly worthy of illustration by drawings and photography. It was probably designed to follow the example of the water palace at Mandu built by Nasir-ud-din's father Ghias-ud-din, and is a singular instance of Muhammadan ideas of luxuriant and cool residence. The architecture is massive and picturesque. The present condition of the buildings is not good, but I believe the Maharaja Scindia has the intention of executing repairs. I propose to have a survey made of the palace, both for purposes of illustration and to show what should be done.

Note on progress of work at Gwalior, at Sanchi, and at Mandu, dated 18th September 1882.

I visited Gwalior in March last, and found that the Courts of the Man Mandir Palace had been evacuated by the Commissariat, and that cleaning, removal of whitewash, removal of partitions and general repairs had progressed satisfactorily. The Teli-ka-Mandir and two Sas Bahu temples were still in hand, and the repair of their roof and towers progressing. Approaches had been made to some of the old Jain caves in the face of the rock outside the fort, and Major Keith was busily collecting and arranging fragments of sculpture in the enclosure around the Teli-ka-Mandir Temple. I pointed out to Major Keith that whilst the roofs of the buildings were in need of considerable repairs to render them proof against rain, restoration was going on in the way of carving stones, and asked him to complete the structural portions of the roof, leaving uncarved any stones inserted for the security of the building.

2. I wrote to the Resident at Gwalior, and suggested the adoption of regulations for the custody of the buildings, and recommended that the necessary sanction be obtained for the engagement of native custodian as specified in the annexed memorandum:

- (1) Names of each building to be cut in the walls, with dates as given in the report of the Director General of the Archaeological Survey.
- (2) Chowkidars to be appointed for—
 - (a) the Man-mandir Palace, | (b) the Teli-ka-Mandir,
 - (c) the two Sas Bahu temples,

with orders to report to the Resident any one disfiguring, defiling, or damaging the buildings.

- (3) No lighted fires to be allowed inside the buildings under custody. The chowkidars are to keep the buildings clean, and to report to the Resident any damage from rain or other cause.
- (4) A suitable shed or dwelling to be assigned to each chowkidar, so that no damage by smoke of cooking or other fires may occur to any of the buildings under custody.
- (5) The orders to the chowkidars to be posted in each building.

3. In May last the Maharaja Sindia contributed a sum of Rs. 4,000 towards the preservative works at Gwalior, and a grant of Rs. 2,500 has been made from Imperial Funds. I have had a series of photographs taken of the Gwalior buildings, and the negatives have been sent home for printing. These show the condition of the buildings as completed or in progress in August 1882 under Major Keith.

4. Major Keith's report on Gwalior is being printed, and may serve as a guide to the fortress and city.

5. Since the report on Sanchi was written, Mr. Mears, in March 1881, Superintendent of Public Works at Sehore, was deputed to remove jungle from the several ruins; to collect all the carved stone fragments; to repair the great breach in the tope; to remove creepers from the face of the mound; to fill in the shaft sunk in the tope; and to clean the sculptures of the northern gateway. A series of photographs showing the progress of these measures have been taken by Din Dyal, Estimator and Draftsman in Colonel Thomason's Office at Indore, and the negatives will be sent home to be reproduced by some one of the permanent processes.

6. Major Keith is about to proceed to Sanchi this cold weather for the purpose of restoring the fallen gateways and of completing the repair of the tope itself. Sir Lepel Griffin, Agent to the Governor General in Central India, has taken a great personal interest in the works at Sanchi, Mandu and Gwalior, and it is due to his repeated solicitations that Government has consented to contribute grants from Imperial Funds for monuments of importance in Native States, and to appoint Major Keith temporarily, Assistant Curator of Ancient Monuments in Central India.

7. At Mandu the removal of jungle has progressed under the Maharaja of Dhar, and some repairs to buildings have been put in hand. Major Keith will, I hope, be able to superintend some work here this cold season, and an imperial grant of Rs. 2,000, will be made to supplement what the Maharaja agrees to contribute towards the repairs, &c.

S

Report on Monuments in Rajputana, together with a Note on works undertaken.

Notes on Mount Abu, Ajmir, Jaipur, Ulwar, dated 5th July 1881.

1. A ride of 14 miles from the Mount Abu road station on the Rajputana State Railway takes one some 4,500 up the hill to the sanitarium of that name. Here are the head

Mount Abu Sanitarium.

quarters of the Agent to the Governor General, Rajputana, and a small convalescent depôt, charmingly situated around the "Neck Lake" or Pearl Lake, and surrounded by picturesque rocks and green slopes covered with trees and beautiful vegetation.

2. The mountain range rises abruptly from the plains, its scarped peaks varying from 5,000 to 6,000 feet in height. The approach on the eastern side is over a footpath.

Dilwara Temples.

steep at first, which then winds through a beautiful valley to the station. The celebrated Jaina temples are about $1\frac{1}{2}$ half miles beyond, at the village of Dilwara. Externally there is nothing to indicate the magnificence of the interiors of these edifices. Two are entirely of white marble said to have been brought from near Chandravati, and for minute carving and profusion of beautiful detail are unrivalled in India. The earlier of the two buildings dates from A.D. 1032, owing its foundation to a merchant, Vimala Sah. The later one was built by two merchant brothers, Tejpal and Vastupal, between A.D. 1197 and 1247. According to Tod, previous to the erection of the Jaina edifices, the immediate spot was occupied by the orthodox divinities Siva and Vishnu, whose ministers would not tolerate the approach of any of the sectarian enemies of their faith. In order to propitiate these, a bribe was offered and accepted. The merchants were accordingly not ungrateful to "Lakshmi," the Hindu goddess of fortune, whom the Jains enshrined in a niche on the right hand of the entrance.

3. This stands isolated in the centre of a quadrangle measuring outside about

Vimala Sah Temple.

100 feet from east to west, and 110 feet from north to south. Along its internal faces are ranges of cells—seventeen on the longer and ten on each of the shorter sides. A double colonnaded piazza elevated four steps above the level of the court passes in front of the cells. In each of the cells is a small altar, on which is placed a crossed-legged figure of Parawantia. Each group of four columns has either a vaulted or a flat roof. The whole is of pure white marble, every column, dome and altar varying in form and ornament, the richness and delicacy of execution being indescribable. Crossing the pavement in front of the entrance, the mandapam or porch before the sanctuary is reached.

In this the carved columns with their struts and the domed ceiling are covered with flowing and graceful foliated sculpture and by figure subjects from mythology, in which the Brahminic and Jain emblems are curiously blended. The builder has here again testified his gratitude to the propitiated Hindus who gave up their site, by enshrining their goddess Bhavani in the south-west corner of the quadrangle.

4. On leaving the enclosure, one passes to a square chamber with a number of columns supporting a low roof, in which is an equestrian statue of Vimala Sah

surrounded by ten elephants and riders. A good deal of damage has been done to the figures, and is said to have been the work of the iconoclast Aurangzib, who is answerable for the destruction of so many temples throughout India.

5. *Repairs to this building are carried on periodically by the Jains, but they are done clumsily. In order to strengthen broken lintels spanning elaborately-carved pillars, uncouth*

masonry arches have been in many cases built up between, thus covering large portions of the delicate sculptures with bricks and mortar! This could be remedied by removing the arches and by supporting the stone beams from above with iron joists, and by bolting these together. Many of the damaged carvings have been treated with plaster of Paris! All this might be removed.

6. The design and arrangement of this shrine are on the model of the preceding, which, however, it surpasses as a whole.
Temple of Tejpalā and Vestopalā.

It has greater dignity, the fluted columns supporting the mandapam being loftier, and the vaulted interior being fully equal to that in the other in richness of sculpture and superior in the execution, which is freer and in better taste. All the marble is most delicately chiselled. The surrounding cloisters have a profuse variety of ceilings, some with handsome processional bas-reliefs. At the end of the quadrangle is a fine gallery containing elephants and large bas-reliefs of Tejpalā and others. In the centre is a model of a temple under a small dome, together with black stone figures of Jaina Tirthankars. *Repairs are executed, but the sculptured marble requires cleansing in the dome of the porch.*

7. This has a handsome entrance, and the sanctuary contains a large brass image of Parimath. There is a good deal of unnecessary filling up with bricks and mortar

Bamā Sah's Temple.

between arches, which might be removed.

8. This is said to be the oldest building. The porch or mandapam has a fine dome, and the entrance to the sanctuary is elaborately carved, but dirty.

Samak Sah's Temple.

9. *Plans and detailed illustrations will be prepared of all the Dilwara buildings; meanwhile it will be important to arrange for the cleaning and other remedies here recommended, and to obtain an estimate of cost.*

10. Ajmir.—The foundation of Ajmir is attributed to the Chohan Prince Ajaypal in the first century of our era.

It is built in a lovely valley, and bounded on the north side by the fine lake "Anā Sagur," which is entirely surrounded by hills, and on the west by the lofty Taragarh with

The Arhai-din-ka-Jhopra.

its fortress. The town is enclosed by ramparts, built by the Emperor Jehangir, the walls of which communicate with the citadel of Taragarh. Colonel Tod in his *Rajasthan* says—"Ajmir has been too long the haunt of Moghals and Pathans, the Goths and Vandals of Rajasthan, to afford much scope to the antiquary." It has, however, one ancient building in the "Arhai-din-ka-Jhopra," or shed of two and a half days, which was constructed out of a prostrated Jain temple by Altamash in A.D. 1236. General Cunningham believes that most of the buildings which furnished materials for the erection of the great mosque must have been prepared and carved during the eleventh and twelfth centuries.

11. The appearance of the old ruin is very picturesque, and the whole of the faces of the mosque is covered with a network of sculptures. The interior pillars are not so irregularly placed one above the other as in the converted mosques at the Kutb, in Malwa and in Ahmedabad; but, as Fergusson says, "if they were

taken down by the Muhammadans, they certainly have been re-erected exactly as they were originally designed to stand."

12. The pillars have greater height than those at the Kutb, and are more elegant in their sculptures and general appearance.

13. The attention of the Agent to the Governor-General in Rajputana was first drawn by the Government of India in June 1874 to the ruined state of the building.

14. An estimate was submitted in May 1875, and sanctioned in August of that year. The resetting of the arches of the façade, fresh paving, setting up columns, repairs to the roof and the renewal of a dome in the south wing were completed. A further estimate for repairs was sanctioned in April 1878.

15. Fortunately a proposal to pull down the entrance to the mosque enclosure was put a stop to by the Agent to the Governor-General (then Mr. A. C. Lyall) and the Commissioner of Ajmir (Mr. L. Saunders).

16. *It now remains to clean the sculptures of the mosque, which can be done with strong soap and water or with a solution of soda. Hard brushes made of bamboo beaten out at one end will remove ordinary crustation, but hard pieces of plaster or dirt should be carefully removed with an iron point. One dome to the south of the mosque is still open and admits rain; and as many of the pieces of masonry are in existence, I strongly recommend restoration. It will be necessary to have estimates framed of the cost of these measures.*

17. The beauty of the lake "Ana Sagar" made it a favourite resort of the Moghal Emperors, and the valley became filled with their palaces and gardens. "One of the most beautiful," says Rousselet, "is the Daolat Bagh, or Garden of Splendour," which was built in the sixteenth century by the Emperor Jahangir, and now serves as the abode of the Commissioner. Elegant marble pavilions stand on the very edge of the lake, and command the incomparable view of the town, and the mountain is reflected as in a crystal mirror. The garden itself is of great extent, and full of venerable trees, beneath whose shade the haughty Jahangir received the Ambassador of an English Sovereign.

18. Colonel Tod in 1820 writes:—"The gardens erected on the embankment of the lake must have been a pleasant abode for the 'King of the World,' whilst his lieutenants were carrying on the war against the Rana; but the imperial residence of marble in which he received the submissions of that prince, through his grandson and the first Ambassador sent by England to the Mogul, are now going fast into decay. The walks on which His Majesty last paraded in the State coach sent by our James the First are now overgrown with shrubs." (See Tod's *Rajasthan*.)

19. One of the pavilions with marble pillars is used as a library, another as an municipal meeting-room; but the architecture is so spoiled by enclosing walls, that it is difficult to realise what the buildings were like. I think all should be opened out and repaired. The buildings might still be used for sitting in, and if fitted with suitable pardahs would be more agreeable as places of meeting than they are now. Their present treatment I consider distinctly vandalistic. Estimates for the measures suggested will be necessary.

20. *Ajmir Town Buildings.*—Ajmir possesses beautiful bazaar buildings with much material for an artist and architect; I propose later on to send some draftsmen to make drawings of ornamental details of the best specimens of Rajput art.

21. The shrine of Khoja Syad at the extremity of a long bazaar which runs

Shrine of Khoja Syad.

from one end of the town to the other is a great court paved with white polished marble and filled with buildings, tombs, mosques, and the mausoleum of the Syad occupies the centre. The saint was born in the year 1132 A.D., and was the first missionary of the Koma

Illustrations required.

to Ajmir. Jahangir in 1610 A.D., built the mausoleum to his memory. Drawings of this and the older surrounding buildings would be of value.

22. Jaipur.—The parent city of the present Jaipur State was founded by one Dhola Ram in A.D. 967, when he and his Kachhwaha Rajputs conquered Amber from the Minas, and transferred their capital from Kho to Amber. In A.D. 1586 the Raja, Man Singh, began the present palace, uniting it with the feudal stronghold of the first rulers, portions of whose buildings may be still seen behind the zenana. About

Amber.

A.D. 1630 the Raja, Jai Singh I., added the "Jes Mandar," the Diwan-i-Khas, and several other palaces, enclosing the whole within a fortified wall. He also made the lake of Tal Koutara by crossing the ravine with a bund, on which he planted gardens and erected pavilions. In A.D. 1699 Sowai Jai Singh II. constructed the fine Ganes Gateway, but the position of Amber, with its inaccessibility and want of room for enlargement, led to the removal of the capital, and in A.D. 1728 Sowai Singh founded the modern city of Jaipur.

23. On the occasion of my visit, Major Jacob kindly accompanied me to Amber and showed me over the palace. The approach

Amber Palace.

from Jaipur is most picturesque: gardens, ruined palaces, and buildings line the road which passes up the valley formed by the Kali Kho mountains and, ascending over the ridge, winds down to the vale of Amber and to the Tal Koutara Lake. The Amber Palace is about 100 feet above the water level, and from the upper plateau a grand view is obtained of the old town buildings, which fill up the north-east part of the valley. "Nothing," says Fergusson, "can be more picturesque than the way in which the palace grows, as it were, out of a rocky base or reflects itself in the mirror of the deep lake at its base, and nothing can be happier than the mode in which the principal apartments are arranged so as to afford views over the lake and the country beyond." An excellent description of the various palace buildings is given in chapter XX of Rousset's *India and its Native Princes*, but a further and more detailed account is better reserved until I have, with the Maharaja's consent, completely surveyed the palace.

24. The Diwan-i-Khas is a singularly handsome building. Its outer row

Diwan-i-Khas.

of columns is of red sandstone finely sculptured, but the *as dit* is, that to appease the jealousy of the Emperor Jehangir, the carvings were covered with stucco, the removal of which would be unbecoming taste and an act of mercy.

25. Passing through the beautiful Ganes Gate the private gardens of the palace are entered. On the left hand side is the fine pavilion of the Jes Mandar, the exterior of which is of white marble ornamented with bas-reliefs. The interior is divided into three apartments surrounded by a verandah, and the walls are covered with beautiful mosaics and inlaid work. The *shik* or mirror work is most elaborate and sparkling, and its application to the Moorish pendentives of the ceilings is strikingly clever. The upper pavilions are also tastefully decorated, and have some beautiful wooden doors, which should be repaired and not allowed to fall into ruin.

26. The pavilion over the Ganes Gate has also doors worthy of preservation. On the other side of the garden are several palace buildings, with the remains of coloured mural decorations and doors of inlaid ivory and sandalwood. *The whole of these relics of mediæval art should, as far as possible, be rescued from neglect.* In one apartment the walls are painted in fresco, with representations of Benares, Muttra, and Bindraban. These are unique of their kind, and furnish some evidence of the original designs of buildings that have since fallen to ruin. I here discovered the Temple of Govind Deva at Bindraban, the restoration of which has excited so much speculation as to the form of its roof. *The frescoes should be carefully freed of dirt and dust, and covered with a hard transparent varnish such as used for pictures.* All the beautiful marquetry doors that remain in the palace should, as far as possible, be preserved in situ, or else placed in those apartments to which visitors are allowed access.

27. *The woodwork should be repaired and kept from cracking by careful dry rubbing with vegetable oil.*

28. The modern town of Jaipur is surrounded by high walls and laid out with regularity. It is remarkable for the wide-ness of its streets, and from east to west is over 2 miles in length; in breadth it is about $1\frac{1}{2}$ miles. The buildings which line the principal streets have considerable pretensions to architectural effect, but the Maharaja's palace, with its pleasure gardens occupying one-seventh of the whole area of the walled city, contains the most remarkable monuments.

29. Some of the older buildings of Jai Singh's time are quaintly decorated with coloured tiles, and together with the wonderful astronomical observatory are well worthy of being preserved from destruction.

30. The more modern *shish* or mirror decorations of the various pavilions, although brilliant and effective, do not compare with the older work at Amber for elegance and refinement in design. It seems, indeed, a pity that the wealth of Indian decorative art is not employed throughout the palace in place of the third rate devices of English upholstery.

31. During my visit to the palace I had the advantage of seeing the armoury, conducted by Dr. Hendley, and I hope that he will succeed in the proposal to rearrange the beautiful arms, so as to be well seen, and in carrying out the project for the formation of a museum of Indian art in Jaipur.

32. There are in the palace a large number of beautiful objects that seem uncared for and undervalued, from which a nucleus could be formed of an invaluable collection.

33. Some fine old carpets which I saw heaped in the palace stores were in danger of being cut up and sent to England. I understand they date back as early as the time of Akbar. Fortunately Colonel Beynon recognised their value in time, and it is to be hoped that they will be allowed by the Maharaja to serve as patterns for the weavers of this country instead of for the looms of Kidderminster.

34. **Ulwar.**—Ulwar is said to have been first mentioned by Ferishtah, who alludes to a Rajput of Ulwar contending with the Ajmir Rajpoota in A.D. 1195.

Palace worthy of illustration.

The city has several buildings of note, although not of great antiquity. The palace, built by Banni Singh, is a picturesque specimen of Rajput architecture, and is in parts worthy of illustration.

35. M. Rousselot says of the palace :—

"The interior of the palace is very simple and ornamented with great taste, with the exception of a few apartments furnished in the European style, where are collected a heterogeneous mass of furniture and other articles from our manufactories, which are the admiration of the natives. The architect's plan for doing without stairs is an excellent one, particularly in this disarranging country. The palace has as many as three or four stories, all of which, reached by means of gently-inclined corridors, prevent the ascent from being fatiguing; and, like most of the palaces in India, it contains a *skish mahal* or chamber of crystals, in which are aggregated all the richest of decorations and mosaics. There is a great difference between modern art and the wonderful architecture of Amber, or even of Rajgarh; but still the decorations here are extremely artistic and of indescribable wealth and richness."

36. **Mausoleum of Baktawar Singh.**—The mausoleum of Baktawar Singh is a handsome-domed building of white marble, and

Illustration wanted.

resembles the chuttries at Govenhan built by the Bhartpur Chiefs in the last century. The Hindus adopted the idea of enshrining the ashes of their dead from the tomb-building Moslems, and the "chuttries" of Rajputana are often handsome and skilful specimens of architecture. *The Baktawar Singh building is certainly worthy of illustration by plans and details, and merits preservative measures.*

37. Not far distant from the Ulwar Railway station is a fine Mussalman tomb dating A.D. 1547, known as Fatch Jhang's.

Fatch Jhang's Tomb.

It is singular in construction, having a set of three ranges of open colonnades, one above the other, surrounding a lofty square apartment with a handsome dome. *The masonry walls are covered with plaster, decorated in parts with handsome incised ornaments, and with coloured tiles. The enclosure requires cleaning out, and the trees, whose roots are destroying the terraces of the tomb and its adjacent mosque, should be removed.*

38. *The windows of the tomb have been closed with masonry, and the interior chamber is thereby darkened. They should be opened out, and to prevent the ingress of bats, a wire-gauze screen fitted to each opening. The vegetation on the roof and dome should also be removed.*

39. There is a somewhat similar building at Ulwar called the Khan Khana, but it remains unfinished.

Khan Khana.

40. Banni Singh was a patron of art, and employed skilled artisans and painters in his palace. His library was stocked

Palace Library.

at great cost, and a splendidly illuminated copy of the *Gulistan* is valued at Rs. 50,000. This book was lent by the present Maharaja to the Exhibition of Native Art held at Simla in 1879, and its leather embossed and gilt binding, executed in the Ulwar Palace, excited very great admiration. It seems a pity that this art of binding should not be more extensively cultivated at Ulwar.

Extract from a Memorandum on the Palace at Amber, addressed to the Resident at Jaipur, dated 18th August 1882.

* * * * *

4. In the spring of last year (1881) I visited Jaipur and other places of interest in Rajputana, and subsequently submitted a preliminary report, copies of which were circulated by the Supreme Government to the Agent to the Governor General.

5. In this report I noticed in general terms the condition of the interesting Palace at Amber, which takes high rank among the Hindu palaces that now remain in India. I ventured to suggest some remedies which seemed to me to deserve the attention of His Highness the Maharaja of Jaipur, but having to-day re-visited Amber, I beg to make the following supplementary observations in the hopes of his becoming sufficiently interested to pass definite orders.

6. In the preliminary report on the Amber Palace, I omitted to mention two very important points in connection with the condition of the structures :

(1) Chujjas are broken in several places in the facade facing Amber, and some of the trellis windows are damaged and broken.

(2) The Jai Mandir is surrounded by a verandah of iron posts and corrugated iron sheets. This seems to me to be an utterly unseemable feature to append to a marble building of Indian architecture. It is a disfigurement by reason of its hiding the upper part of the building, and is by reason of its material more suited to a temperate climate than to a tropical one. Its removal appears to me the only remedy for doing justice to the pavilion, and for giving the necessary light to the interior, decorated as it is with singularly beautiful mirror decorations.

7. I now discover from my inspection of to-day that shortly before the Viceroy's visit last year to Jaipur, many of the palace walls were covered with whitewash, and I regret to observe that the beautiful Dwan-i-Khas did not escape this operation.

8. Whitewash is, I submit, a material which is only properly used to cover mud walls or plastered masonry, but to apply it to stone-work of architectural beauty, is to offend every accepted canon of good taste.

9. I cannot too strongly advocate the extensive removal of whitewash from all *bona fide* masonry or marble.

10. I also commend to notice the desirability of cleansing the marble roof and domes of the Jai Mandir which have become stained and blackened by weather.

11. A pair of marquetry doors taken from the zenana rooms are now deposited in the Jaipur Museum, but I would mention that an order of the Maharaja's Council passed last year decided to keep all the carved and ornamented doors of the Amber Palace in the palace. I therefore recommend that the doors be returned to Amber, and that these, together with those that still remain, be repaired and renovated in order to preserve the tradition of a beautiful art in its original home. In the printed report alluded to, I took occasion to mention the frescoes in the room off the Sukh Mandir. I now regret to state that their deterioration is accelerated by the leakage of rain, which dampens the walls and discolours the paintings. Finally, I cannot too strongly recommend that the repairs of the Amber Palace be thoroughly carried out in the interests of India, and as one of her national monuments.

Notes on Udaipur, Ahar, Nagda, and Chittor, dated 13th September 1882.

1. Not the least of the many charms of Kashmir is to be found in its picturesque buildings, whilst the surroundings of rugged cliff, snow-capped ranges, wooded glens, winding river and rushing torrent, combine in a thousand ways to enhance the beauty and solemnity of the ancient ruins. In Kashmir we have the wildness of the hills and the valleys as a contrast to its massive and early temple architecture. Here and there, it is true, the refinement of the Moguls reveals itself in gardens and fountains, such as those of the Shalimar, on the city lake at Srinagar; but the prevailing elements of contrast in the valley are the grand and massive monuments of man set around with all the resources and beauties of wild nature. Conditions such as these infuse a rare flavour into the old architecture of Kashmir, and render it almost impossible of repetition elsewhere.

2. Although it possesses a wholly different style and far more elaborate sculpture, Udaipur has all such advantages. It has architecture, picturesque and elaborate to an extent which I had not before appreciated. It has beautiful scenery, such as unfolds itself out of mountain, slope and field, and the vast areas of artificial water which cover the country are features in landscape gardening on the largest scale that I know of. Udaipur was founded by Rana Udai Singh in 1568, and he conceived and carried out the idea of creating an artificial lake, on the margin of which to build a palace. The Arvali mountains, the great feature of Meywar, surround the locality, and by raising a dyke or bund across the beautiful valley, streams were dammed up to form the "Pachola Sagar." The city is situated on an elevated strip of ground parallel to the shore of the lake, and crowning the ridge stands the palace over 100 feet in height. This pile of stone and marble, which has grown by the various additions of successive Ranas, is most picturesque and imposing. In the midst of the lake, which it overlooks, stand the two water palaces, the Jagmandir and Jaguawas, and but for their domes and kiosques, the view from the palace terraces reminds one more of Windermere and Ullewater than of an Eastern country. The artificial lakes of Meywar are not only useful works on a large scale, but are most beautiful adjuncts to the mixed scene of wild hill, gentle pastures and wooded slopes. They fertilize the surrounding fields, their masonry dykes are often covered with elaborate marble sculptures, and their waters reflect and set off the beautiful Rajput temples and buildings generally found on their shores.

3. The temple architecture is that known as the Jaina style, and the porches and sanctuaries are all on one general plan, although the variety and fertility in resource displayed in the roofs or *sikras*, the graceful ornamentation applied to columns, the wonderful intricacy of the patterned ceilings, and the beautiful decorative friezes of figures which cover the external walls, strike one as full of marvellous variety.

4. On the other hand, the secular architecture of the palace, dwellings of the Meywar nobility and city houses, is plainer, but the buildings are planned on all conceivable lines, and their general effect is picturesque to a degree. The style, although using the pointed arches and the cusped openings which found favour in the Imperial buildings of Delhi and Agra, retains the individualities of Rajput architecture, *i.e.*, dignity and repose.

5. Udaipur presents an imposing appearance when approached along the road from Nimbahera, and on the afternoon of the 30th July I had a first impression of the city in the distance, as I drove into the valley towards the Residency. The

palace of the Maharana, the temples, houses of the Thakurs, and dwellings and walls of the city combined to form a picturesque outline against the Arvali Hills beyond. Arrived at Udaipur, I became the guest of the Acting Resident, Lieutenant-Colonel Euan Smith, and after he had presented me to His Highness the Maharana, the most admirable and complete arrangements enabled me to see everything of interest in Udaipur itself, at Ahar, at Eklingi and at Nagda in the immediate neighbourhood.

6. On the 31st July Colonel Euan Smith took me to see the Maharana at his palace, and here it was that I had a first view over the lovely "Pachola Sagar." Nothing is visible of this beautiful lake until one gains the crest of the ridge of high ground, previously mentioned as the site of the palace and city. Driving in at a fine old gateway, the principal street, lined with quaint shops, leads one up an incline to the gates and range of lofty buildings, forming the Maharana's palace. Passing these, we alighted at a modern villa built by the present Maharana, and here it was that His Highness received us, and that the lake and its island palaces burst into view to the west. During the interview the Maharana, on becoming acquainted with the object of my visit, expressed himself in favour of preserving the antiquities and architectural monuments of his country, and said he would be willing to receive suggestions on the subject of repairs, and to allow any works undertaken by him to be supervised by an officer appointed by Government. His Highness has not only great appreciation for the beauties of nature, being justly proud of Udaipur and its beautiful scenery, but has great taste in matters of art, and has already done much to improve and renovate the old palace buildings both at Udaipur and at his ancestral stronghold on the Chittore Hill. Unlike the Mahratta and Moslem rulers of other States, who came as conquerors into possession of all classes of ancient remains, he looks with pride on the historical monuments of Meywar which perpetuate the traditions of deeds extending through a dynasty of over 1,000 years duration. Early on the morning of the 1st August I was permitted to visit the palace buildings, and was conducted by the "Kavi Raja" Shamul Dass, one of His Highness's Members of Council and Court historian or bard. In the afternoon I visited the island palaces of "Jagmandir" and "Jagnawas." On the morning of the 2nd August I visited the chattries or cenotaphs of the Maharanas of Udaipur at Ahar, with Mr. Wingate, c.s., Settlement Officer in Meywar, who was good enough to show me the place. In the afternoon I went to see the city temples and re-visited the island palaces.

7. On the 3rd August, Shamul Dass showed me for a second time over the palace buildings, my notes on which I desired to verify and correct. On the 4th August, His Highness most kindly made a collection at his palace of his arms, shields, lances, swords, daggers, ivories, enamels, &c., and permitted me to select some for photography. On the 5th August, Colonel Euan Smith, Mr. Wingate and I rode out some 12 miles to Eklingi and Nagda, where I had an opportunity of seeing the fine Hindu and Jain temples of those ancient localities. On the 7th, I left Udaipur for Chittore, and inspected the numerous buildings in the fortress on the 8th and 9th August. The following are the points I noticed in the various buildings visited, and what I think should be done to ameliorate their condition and secure their preservation.

8. **Palace at Udaipur.**—This pile of buildings* has been described as standing on an elevated piece of ground above the city, and with a fine view to the west over the artificial waters of the "Pachola Sagar." The first gateway† leading from the city was built by Partab Singh in A.D. 1594; beyond this is a handsome triple doorway‡ or Turpolia

* See photograph.

† See photograph.

‡ See photograph.

built by Sangram Singh in A.D. 1711, and to the left or west of the intervening courtyard are a set of 8 "Torns" * (or sculptured archways supported by masonry shafts) erected and used by various Maharanas for the distribution of largesse by the weighing of their persons against gold and silver coin.

* See photograph.

9. Passing under the "Tirpolia" one comes in view of the picturesque western façade of the palace range,† The Bari Mahal or Great Court is nearest on the right or east. It was

† See photograph.

completed about A.D. 1597 by Amara Singh II, and has a handsome superstructure of marble fancifully wrought into corbelled windows and trellis screens. This superstructure or upper storey rests on a handsome string course of marble carved with bas-reliefs of elephants. The wall below this is, however, of white-washed masonry, and would be greatly improved by cleaning to show the natural colour of the stone. I should here mention that the Maharana has given me permission to have a plan made of all the various apartments, courts, &c., of the palace, and that these notes are preparatory only until the plans can be referred to and a more comprehensive monograph prepared in inference to them, and to the photographs now in course of being taken. I therefore will here content myself with briefly mentioning those parts of the palace to which Shamul Dass conducted me, and in the order of our progress.

10. The whole of the western façade of the building is extremely picturesque and full of variety, and is confronted by a long terrace and colonnade, under which are kept the Rana's elephants. Passing up a flight of steps at the south end of the palace, we entered through a doorway and made our way to the "Khash Mahal,"‡ built in A.D. 1844 by Surul Singh,

‡ See photograph.

now used for audiences and Council meetings, and consisting of a small courtyard with a colonnade at one end supporting that peculiar cusped form of arch adopted by the Rajputs of Meywar. We next came to the "Karn Belas,"§ built before A.D. 1810, a

§ See photograph.

courtyard surrounded by a colonnade of pillars and a flattened edition of the cusped arch noted above. On the roof of the colonnade is a curious metal astronomical instrument, and from this spot one obtains a good view to the east, over the lake, and to the west, of the river façade of the "Bari Mahal," the lower part of which here visible was commenced by Amara Singh I in A.D. 1597. Below the Karn Belas are a set of apartments, with elegant windows overlooking the lake, but the rooms are too small for modern ideas of comfort, and now occupied by lumber.

11. The upper storey of the "Bari Mahal" is an open garden surrounded by

See photograph.

marble trellis, kiosques and pavilions, with some handsome doors inlaid with ivory. In the centre of the court is a tank encased with huge slabs of marble.

12. The Bari Mahal, also called the Amar Belas, was completed by Amara Singh II in A.D. 1711. There are numerous carved

See photograph.

wooden doors worthy of illustration, and some curious slabs of marble, measuring 3 feet square, cut with water channels in geometric devices. Handsome pavilions crown the upper terrace of this palace building, and their domes are decorated inside and out with ornamental carvings.

13. Adjoining this is the "Dilkushal," built by Karn Singh, and decorated

See photograph.

with mirror work of painted and gilt back grounds. An adjacent pavilion, built A.D. 1744,

is covered with blue and gold porcelain tiles of Chinese make. Mixed up with these are some quaint Dutch porcelain tiles.

14. The *Chini-ki-Chitro Sali*, built in A.D. 1716 by Sangram Singh II, consists of a court and pavilion with finely inlaid mirror work, with flowers, &c., on a ground of plaster. One small room is entirely covered with the Dutch tiles noticed above, the subjects being skating scenes, windmills, boats, biblical scenes, &c. The walls of another small room are faced with dark blue and gold tiles of Chinese porcelain. The *Moti Mahal*, built in A.D. 1828, is decorated with mirrors and coloured pictures. Below this is the *Choti Chitro Sali*, a court with walls inlaid with brilliant mirror mosaics of peacocks. Off this is a small pavilion with a medallion of the Rajput sun, and below a dado of curious raised and coloured plaster. A pair of small doorways, with coloured wooden figures in relief of Native and European men and women, lead to the *Pitum Nacas*, or Palace of Delight, decorated with glass and porcelain. A resplendent mirror throne projects over the

See photographs.

court of the Moti Mahal. The *Mansab Chand*, made in 1857, is a most curious apartment, the walls of which have a series of glazed niches filled with all kinds of English China figures and vases of Bohemian glass. The *Raina Ujjan*, dating from A.D. 1571, is a handsome old court and pavilion with some solid

See photographs.

Hindu columns. The walls of the courtyard are pierced with stone screens, and the whole is whitewashed, which is a pity.

In the centre of the floor of the pavilion is a square of coloured marble mosaic which points to a possible origin of the Agra work. From this one mounts up to the *Chandee* (or *moon*) *Mahal*, from which a good view is obtained of the lake. Chobs and processional palms are stored in this building, which has some well designed ivory doors.

See photographs.

15. The foregoing compose the principal portions of the first range of palace

See photographs.

buildings; next to it is a lofty but plain structure accommodating the *zenana*; and beyond this to the south is the "*Kumar Pudar-ki-Mahal*"—a picturesque two-storied erection of Karn Singh's time, A.D. 1616. This is unfortunately much spoilt in appearance by whitewash. Beyond this again to the south is the modern villa of the Maharana, below which and to the east is a pretty garden and modern pavilions in the Rajput style. Descending the ridge towards the lake we now came to a range of palace buildings on its margin.

16. The *Akhara Mahal*, or Court for Athletes, has at its northern end a raised terrace with square slabs of marble cut with water channels in intricate geometric devices. In the wall at the back of this terrace is a window surrounded with porcelain plates, and the walls of a small apartment off the terrace are faced entirely with porcelain plates of the old willow pattern, the effect of which is very good. Near to this is the *Himalat Belas* built by Bhim Singh in Colonel Tod's time, with some English pictures on its walls; beyond to the north is the *Jalanwar* or Fountain Palace, built by Jawan Singh in 1828, with steps down to the lake, and some fine mirror mosaics on its walls at the back which are worth renovating and preventing from peeling away. This completed my tour of the Udaipur Palace, and I am greatly indebted to Shamul Dass for the trouble he took to show me round and give information.

17. **Jagnawas Palace.**—This island palace was commenced by Jagat

See photographs.

Singh about A.D. 1823, and is a collection of small apartments, courts and gardens, which afford the Maharana a pleasant retreat at certain seasons of the year. Viewed from the shores of the lake and on approaching it by water, its pinnacles and

domes make an effective and varied outline. On landing I found that numbers of workmen were renovating portions of the buildings. The *Sajjan Belas*, now nearly complete, has been almost entirely rebuilt, and some mirror decorations in pavilions flanking a tank for bathing are in excellent Native taste. The *Sunehar Palace* is a modern classical villa built by His Highness's predecessor, and not in the best harmony with the oriental surroundings. The *Nahar-ki-Mahal*, or Water Garden, has deep channels of masonry surrounding flower beds and palms, and some pavilions of great beauty decorated with mosaics of glass which it is to be hoped the Maharana will preserve. Some old shish arabesques of the same character, but of great elegance and refined taste, cover the walls of the garden of the *Khush Mahal*. *Unfortunately the damp has caused them to become loose from the wall, and great skill and care will be needful to repair them.* The *Bari Mahal* is a largish open court with a handsome pavilion to the south, and some coloured frescoes of elephants adorn the lower portions of the walls of the courtyard. The *Lil Aaram* is a small garden with an open colonnade facing the lake towards the Udaipur Palace. Here, again, mirror decorations are used to ornament the walls, and well deserve to be kept in repair.

18. The Jagmandir Palace.—Jaggat Singh commenced this about A.D.

1623, and built the domed pavilion or *Gul Mahal* which was occupied by the fugitive Prince Kurram, afterwards the Emperor Shahjahan. The rest of the gardens, pavilions and courts were built by Sangram Singh. The *Gul Mahal* is the principal building on the island, and in fair order, extensive repairs having been executed. The terrace confronting it has, however, sunk and given way in parts, and being of marble slabs is worth while to relay and raise on concrete above the flood level of the lake. The interior of this building is decorated with some bold mosaics in jasper, agate and onyx, and I cannot but think that Shahjahan got the idea of adorning the Taj with such work from his residence on the Jagmandir island. Be this as it may, the Udaipur mosaic is bold and on a larger scale of pattern than the elegant foliated panels of Pietra Dura that cover the Taj, whilst the tomb of Shahjahan's father at Shahdara, Lahore, built shortly after Shahjahan's flight to Udaipur, has mosaics more like those of the *Gul Mahal* in the scale of pattern. The repairs to the *Gul Mahal* have so far been efficacious in keeping out rain and preserving the building, but the heavy pointing in plaster introduces an objectionable network of white lines into the exterior of the walls and domes. In both island palaces it struck me that the palms, shrubs and trees had been allowed to outgrow themselves, and by so doing obscure the buildings.

19. Udaipur City.—On leaving the Udaipur Residency the city is entered

by a double gateway of bold and effective design; the domestic architecture which one sees in great variety on the way to the palace is full of interest and suggestion, and would anywhere else be remarkable, but the palace buildings and those on the island of the lake put all else in the shade. There are, however, several remarkable temples, the principal one having been built by

Jaggat Singh II in A.D. 1734. Although so modern in date, it preserves all the main characteristics of the ancient Jain temples of Meywar. It possesses a fine porch and lofty sanctuary covered with bold figure-fringes and architectural ornament and is confronted by a handsome shrine containing a large brazen image of Garuda, whilst flanking this to the north and south are small and well conceived temples dedicated to Ganesh and Mahadeo. *Whitewash, which seems now-a-days to be so much in fashion, mars many of the sculptured enrichments of the buildings, and I cannot too strongly advocate its complete removal.*

20. **Ahar.**—The small hamlet of Ahar, two miles to the east of Udaipur, is the interesting ancient site of the city of Ahar.

See photograph.

Fragments of carved stone are found in the village walls and buildings, notably in some Jain temples. Near the road is a small and highly sculptured temple said to have been erected under the auspices of Mira Bai. It stands isolated in an enclosure and is much ruined, the sculptures having been mutilated and covered up with plaster by Alamgir. Some little distance beyond the village are the chuttris or cenotaphs of the Mahammas of Udaipur and other notables of Meywar. The *Chuttri of Amur Singh I* is a fine large structure, but vegetation is doing damage to the roof, dome and terrace. A large tree has grown up close to a corner of the latter, and unless removed will sooner or later uproot the masonry. Saagar Singh's *chuttri* is also a fine building, but was never finished. Vegetation requires to be removed. This is one of the largest of the cenotaphs and has some handsome friezes of sculptures. *Amur Singh I's* *chuttri* is covered with vegetation. Near this is a small cenotaph of the son of *Uda Singh I*, but its sculptures have been mutilated. The whole enclosure or graveyard is greatly overgrown with vegetation and trees, and might easily be laid out and set in order.

See photograph.

See photograph.

See photograph.

See photograph. Near this is a small cenotaph of the son of *Uda Singh I*, but its sculptures have been mutilated. The whole enclosure or graveyard is greatly overgrown with vegetation and trees, and might easily be laid out and set in order.

See photograph.

21. **Nagda and Eklingji.**—Nagda, 12 miles north of Udaipur, is said to have been founded by Bappa early in the 8th century, and close to it is the temple village of Eklingji, also connected with the early life of this first of the Meywar Ranas. The antiquities of the locality are therefore at least historically important. From the accompanying diagram the position of the temples at Nagda and Eklingji will be understood. The lake which separates the two villages is one of the many artificial waters which beautify the Udaipur valley and is surrounded with wooded hills. The most interesting ancient structures at Nagda are two temples called the "Sas Bahu." Their position is shown at A and B. Both are in the first rank as specimens of Jaina architecture, and are exceedingly ornate and comparatively perfect. There are no inscriptions to give any account of these remarkable monuments, but I imagine that they are both anterior to the 11th century, and that B is earlier than A. Recent damage has been done to both by chipping off faces, &c., of figures, and should, I submit, be rendered impossible by enclosing the locality and by custody.

22. The rough plans explain their arrangement. In A the roof of the porch and tower of the sanctuary should be cleared of vegetation. The mullioned windows f and g with their

See photograph.

carved geometric tracery and figure carvings are exceedingly fine. The porch *a b c d* is even more elaborate and finely sculptured and in unquestionable taste. The interior of the porch has four handsome columns supporting an elaborate dome; the ceilings throughout are of great diversity of design and curiously honey-combed. The temple appears to have been at one time dedicated to Vishnu, there being near the sanctuary a recumbent figure of that god on a snake in black marble:—(Vishnu and Lakshmi on Ananta.) The exterior carvings would be greatly improved by being cleaned, but the interiors of the porch and sanctuary are blacked by smoke, dirt and bats, the dung of which covers the floor, and should be thoroughly cleaned.

In B the roofs also require weeding of creepers. The porch *h k l m n o* is handsome and its carvings are worth cleaning. The image of four columns at C have the appearance

See photograph.

at a distance of being Grecian, but on examination it is seen that they are

fashioned on the orthodox Hindu plan of varying the sections of the shaft from the square and polygon to the circle. A ruined temple at C in the sketch diagram is surrounded by water and the lotus plant.

See photograph.

23. Near this are two Jaina temples D and F, the former built in A.D. 1143 by the Khumho Rana. Neither call for any special remark. Beyond these at G is a temple and porch which has an ancient look. Close to the causeway at the north end of the lake are two small temples H and K. The smaller one H is apparently the older, and

See photographs.

is handsomely sculptured. A figure of Vishnu is in the sanctuary above the causeway; to the east are several temples L M N O; that at L being a large Jain one.

They all want clearing of dirt and jungle.

24. The groups of temples at Eklingji are held very sacred. Two of them at P and Q are solidly built of masonry and covered with carvings. P is partially damaged by whitewash. Q is said to have been built by Mira Bai.

25. Chittore.—Chittore is over 60 miles north-east of Udaipur. The Malwa branch of the Rajputana-Malwa Railway passes a little over a mile from the present town, above which the ancient fortress towers as a hill mass 500 feet above the plain, and over 3 miles long by half a mile wide. The ascent, which begins from the town, is a mile to the upper gate, with a slope of about 1 in 15. The buildings here noted on are in the order pointed out to me by the kiladar, who was my guide.

26. The *Scagar Chaori* is a very elaborate building. Although the dome is now plain and unornamented outside, the interior is finished in one of the most beautiful styles of Jain

See photograph.

architecture; in the centre is a canopied masonry dais or "chhatra" on which the enthronement of each of the Ranas is said to have taken place. The bas-relief of the exterior walls are exceedingly bold and effective, and the building is, both from historical and architectural points of view, well worth preserving. *The massive masonry walls which have been built up to both sides of the building cut it in half. Their removal would be a great improvement. The carvings inside and out require cleaning, and all vegetation should be removed from the roof and walls.*

27. The great palace of the Rana, or *Rana Mahal*, is a plain building, but in excellent taste, and in course of being renovated for the use of the present Maharana.

28. A group of elaborately carved Jain temples known as the *solis* (97) *Dandaki-Mandir* should be preserved. Some of

See photographs.

the masonry structures require strengthening, and the weeds and acacias which cover the enclosure and walls should be cut down. Near to this are two other Jain temples with very handsome exterior carvings.

Vegetation should be here thoroughly cleared away and the sculptures cleaned.

See photographs.

29. Next comes the so-called *Mira Bai Temple* with its curious interior arrangement of columns. Its tower or *sikhra* is all

See photograph.

of stone and very handsome. *The masonry walls to the north of the building are much damaged by trees which it would be as well to destroy. There is a good deal of injurious vegetation elsewhere in the building.*

30. The *Tower of Victory* built by the Khumho Rana, one of the most powerful Ranas of Mewar, is the striking monument of Chittorgarh. It was erected about the middle of the 15th century during a revival of Jain architecture. The nine storeys composing this exceedingly interesting tower are covered inside and out with sculptures of great beauty. The arrangement of the staircase as it passes through the various storeys is especially curious. The dome that now surmounts the ninth storey was a substitution in 1832 for the old roof which was destroyed by

lightning. Being in the Mogul style, and not of the best type, its removal would, I think, be a great improvement, and it would be even better to substitute a flat unobtrusive covering in its place rather than attempt any imaginative restoration.

A number of chhajjas, cornices, pillars of projecting windows, parapets, &c., require renewal, and the ubiquitous weeds should be destroyed.

51. Near the tower and in a south-west direction is a large stone temple known as the Mokul-pi-ka-Mandir, dating from the 15th century. *It is choked up on all sides with vegetation, and its roof has been incaded and nearly destroyed by pipal roots which should be removed. Some loose stone masonry abutting on the temple should be taken down and the whole structure set free. What is now unobscured of the sculptures of the exterior shows some very fine and interesting friezes of figure subjects depicting real scenes in history. The carvings require cleaning. The interior of the porch and temple should be thoroughly cleaned out, and some of the masonry in lintels, &c., requires strengthening. The floor of the sanctuary is below the ground level, like that at Ambernath in Bombay. North and east of this fine old building are two interesting doorways—that to the east is on the street of the Sindhi Bazar, and the houses which encroach on it right and left might with great advantage be removed. My guide called both of these gateways "Ahar-ki-Darwaza."* Close

to this spot is the picturesque and historical fountain and tank known as the *gar-mukh*, and above is the *Mahavati*, where some of the early Ranas were cremated.

52. The foregoing are buildings that my guide Jive Rao, the kiladar, showed me the first day of my visit.

53. On the second day I began by examining the *Ram Pol* gateway, from whence Akbar is said to have carried off the wooden doors to the Agra Fort. I took an opportunity on my return *via* Agra to look at these gates, and there can be no doubt that if they are the original ones from Chittore, Akbar had them covered with the present plates of copper ornament which is thoroughly Muhammadan and in the same style as the ornamentation in the Agra palace buildings. The *Ram Pol* gateway is a handsome masonry structure with bold friezes along the plinth. *Vegetation should be removed.*

See photograph.

54. The old *Jain Tower* (A.D. 896) of *Sri Allat* is in considerable disrepair and will require very careful treatment. *A tree is doing great damage in the uppermost storey, and there is much vegetation in the walls. One of the four projecting windows in the top storey has fallen away, and the niche with an erect Jain figure to the east will soon fall unless attended to. The carvings near the base want cleaning. The temple near the Jain Tower has some handsome carvings inside and out which are very neglected and dirty and deserve cleaning.*

See photograph.

55. The ancient temple to Mahadeo, *Nilkant* by name, is said to have been built by Bappa in the 8th century. It is kept in some repairs, and has a resident priest.

See photograph.

56. Close to this is the *Sunaj Pol* or *Gate of the Sun*, a plain structure, and the eastern entrance to the fortress. A little further on the road, the temple of *Samidheshwar Mahadeo* is passed; its sikra or tower is partly fallen, the enclosure covered with fragments of sculpture, and the porch or mandap has lost its dome. The sanctuary has that peculiar sunken chamber which I first observed in the temple of Ambernath in Bombay, and the plan of the temple is on the lines of an octagonal star. *Vegetation and trees are doing damage; sculptures require cleaning.*

57. Next comes an ancient looking building with two small domes, laid in the Hindu fashion of horizontal courses, called the "*Chattrang-mori-ka-Gumla*."

38. The *Padma-ka-Mahal* and its island palace are being repaired by the Maharana Sujan Singh. The principal gateway is a handsome piece of architecture. *The niches and masonry basement facing the tank have unfortunately been whitewashed.*
39. The *Maha Kali Temple* has all the appearance of being ancient. Its sikra and dunes covering the porches have been renewed in plaster. The exterior carvings are most interesting and curious. *They require cleaning.* The porch has a fine ceiling.
40. The *Patta Sing and Jaisal Palaces* are picturesque buildings with dark blue tiles showing in portions of the exterior. A short distance further on the Tower of Victory comes into view again, and the circuit of the fortress is complete.
41. The remedies here recommended are not very elaborate or difficult of execution. The structural repairs will require skill no doubt, but a very considerable improvement will be evident by simply clearing vegetation and cleaning up the buildings and their surroundings.

Note on works in progress, dated 19th September 1882.

The Dilwarra Temples are under two panchayats or committees, one at Sirohi, the other at Ahmadabad. The former can sanction annual repairs up to Rs. 2,000 and original or new works up to Rs. 15,000. The recent repairs are, however, clumsy and certainly inexpensive. I have authority to survey the various buildings.

2. At Ajmir a survey has been made of the Arhai-din-ka-Jhopra, of the Daolat Bagh, of the Khoja Syad's Tomb and surrounding buildings. There is now but one dome that is unrepaired in the Arhai-din-ka Jhopra. The enclosing quadrangle requires repair in places, and the carved fragments in the mosque proper should be cleared.

3. An estimate for clearing one of the marble pavilions in the Daolat Bagh has been sanctioned, and the work has commenced under Mr. Brassington, Executive Engineer, Mayo College. The adjoining marble pavilion, now used as a station library, will also be cleared and repaired, and a grant of Rs. 2,000 has been contributed from Imperial funds. The hammam, occupied as the Commissioner's office, should be repaired as soon as possible.

4. The survey of the Khoja Syad's Tomb will show what remedies are essential to the preservation of the numerous buildings.

5. A restored drawing of the Taragarh gateway has just been completed, and I understand from Lieutenant-Colonel Steel, R.E., Secretary to the Agent to the Governor General, Rajputana, Public Works Department, that the funds for its reconstruction will be provided.

6. In regard to Ambar, near Jaipur, I have recorded my view in a memorandum of 18th August 1882, see page clxxiv, and I hope that His Highness the Maharaja will take the matter into his serious consideration.

7. I am not aware of anything having been done yet at Ulwar, not having been there since April 1881, but hope that the recommendation in regard to Fateh Jung's Tomb will at least be carried out.

8. My report on Udaipur and Chittore recommends a number of simple remedies which might easily be undertaken without delay, but for all structural repairs I recommend that an officer be appointed to draw out the specification of work, and to supervise it whilst in progress; but he should, in my opinion, have no responsibilities as to rates or the disbursement of money. Mr. Brassington, Executive Engineer of the Mayo College, Ajmir, could supervise the work at Chittore, and the engagement of his services would be the most convenient and inexpensive arrangement that I can think of. Chittore is 12 miles journey from Ajmir, where Mr. Brassington already has an office and establishment.

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Report on Monuments in the Punjab, together with a Note on works undertaken.

Note on Umritsar, dated 1st January 1881.

1. *The Darbar Sahib or Golden Temple.*—The temple or Har Mandir as it was at first called was built by Guru Arjan, the successor of Rām Dās; it occupied the site of the present building in the centre of the sacred tank, but was destroyed in 1761 after the battle of Ghulā Ghara near Ludhiana, and was rebuilt in 1762.

2. Maharaja Ranjit Singh, after seizing Umritsar in 1803, spent considerable sums of money on it, and from this time the temple has acquired the name of Darbar Sahib. The building is a remarkable specimen of modern Indian architecture. Its features and details are partly Hindu and partly Muhammadan in origin; but, as Mr. James Fergusson observes, neither its outline nor its details can be commended. The general effect produced by its marbles, walls of mosaic, and domes and upper storey overlaid with gold is, however, very rich and splendid, and its situation in the midst of the beautiful lake, surrounded on all four sides by picturesque pavilions or "bungas" as they are called, shows off the building to full advantage.

3. Umritsar is the Holy City of the Sikhs, and the Golden Temple and its surroundings are held in the highest reverence. A Committee of Sikhs presides over the welfare of the buildings, and repairs are now being sedulously executed, both inside and outside the temple. The painted and gilt interior decorations are being renewed, where faded or damaged, in a masterly way. This shows that native artists, left to themselves, are as thoroughly capable of emulating the splendid ornamentation brought into India by the Moslems as they were in the days of Akbar and Shahjahan.

4. As regards the preservation of the temple and the outlying Sikh buildings, I would recommend a greater attention to cleanliness. In spite of the sanctity which compels every visitor—Native or European—to remove his shoes, there are corners in the enclosure where the stenches are sickening. I also noticed the greater part of the inlaid and carved woodwork in the Darshani Darwaza, in the carved doors in the temple, and in the Baba Atal to be suffering from dirt and neglect. A little soap and water and occasional oiling would go far to preserve this woodwork, which is very beautiful of its kind.

5. The Baba Atal is a lofty tower built over the tomb of Baba Atal in A.D. 1628, and is one of the buildings held in reverence round the Golden Temple. Beyond its size and pleasing proportions, there is nothing very remarkable in the exterior; but the interior decorations of gold and colored arabesques are effective and handsome. These latter are also being renewed by the Sikh Committee.

6. In accordance with the wishes of Sir Robert Egerton, the Lieutenant-Governor of the Punjab, expressed to me at Lahore in November last, I have caused drawings to be put in hand of the Golden Temple and the neighbouring tower of Baba Atal.

7. Besides general plans, sections and elevations, details are being made of doorways—inlaid work in marble and wood—of wooden carvings, and of the gilt and painted interior embellishments.

8. These when complete will furnish some interesting material for the study of modern Indian decorative art.

9. *Ram Bagh*.—To the north of the city is the Ram Bagh, which was enclosed as a garden by Ranjit Singh about 1820, and in which he erected buildings for the accommodation of himself and his court whenever he stayed at Umrkot. These buildings were, until quite recently, used for the district courts and treasury, but another more convenient site has been found on which the kutcherry is newly built, and the Ram Bagh is well cared for as a garden and the buildings kept up as objects of interest only.

Extract from a letter from CAPTAIN H. H. COLE, R.E., Curator of Ancient Monuments in India, to the Secretary to the Government of the Punjab, Public Works Department, dated Simla, 23rd August 1881.

I have the honour to enclose a copy of my report of the 10th May 1881 (see page XIX) containing certain recommendations for preserving national buildings of interest at Lahore and Delhi, and to solicit that I may be informed whether His Honour the Lieutenant-Governor wishes to undertake any of the works specified before the close of the current financial year.

2. The plans to show the present condition of the buildings, and what may, with advantage, be done, are in course of being framed out in my office, and it will be necessary to appoint an officer to frame the estimates.

Extract from a letter from CAPTAIN H. H. COLE, R.E., Curator of Ancient Monuments in India, to the Secretary to the Government of the Punjab, Public Works Department, dated Simla, 23rd August 1881.

I have the honour to report that I have consulted with Major-General Cunningham, Director General of the Archaeological Survey, as to the best way of dealing with the Buddhist ruins in the Peshawar Division; and beg to submit the following recommendations, in which General Cunningham fully concurs.

2. It is well known how interesting and valuable are these remains, both from an archaeological and artistic point of view. On the one hand, General Cunningham is anxious to continue an examination of the Peshawar Valley, which has already yielded so much valuable historical and archaeological information and matter; and on the other hand, I would urge the importance of preserving to posterity what remains of the art and architecture of the Gandhara Monasteries.

3. Already many valuable and beautiful sculptures have been exhumed from the Takht-i-Bahi, Shahbaz Garhi, Sahr-i-Bahlol, Jamal Garhi, and elsewhere; and those that are now exhibited at the Calcutta and Lahore Museums are of the highest interest and value.

4. A good deal more may be discovered and be applied in the elucidation of Indian archaeology and art. Many of the places already examined may be expected to yield further discoveries; and the village of Nogram or Ramgarh is a very promising site.

5. How far the remains that may be brought to light can be preserved *in situ* is I think, to be only determined by consulting with the local authorities, and by taking each case on its own merits.

6. In some places the fanaticism of the Muhammadans is a source of danger to the figure sculptures, which they mutilate the instant they are dug out of the sandy mounds and earthed up ruined buildings. In such cases I think the only way to preserve after excavation is to remove the sculptures to a place where they can be guarded.

7. In other cases it may be possible to arrange for custody.

8. Very few of the remains appear above ground, and the first step is to secure the services of a company of Sappers and Miners under the command of an officer with a taste and appreciation for archaeology. The next step is to examine carefully the most promising localities and to excavate.

9. I would recommend the examination of the Takht-i-Bahi, Shahbaz Garhi, Jamal Garhi, Shah Deri, and Takal Bala (near Peshawar), and that the sculptures which may be laid bare and rescued from sand and earth, be collected at Naoshera and from thence distributed to the various Indian Museums and Schools of Art.

10. At the same time I am strongly of the opinion that any buildings or ancient remains should, if possible, be preserved *in situ*.

11. If these recommendations meet with the favourable consideration of His Honour the Lieutenant-Governor, I hope that the services of a company of Sappers and Miners may be secured for a short time this ensuing cold season to carry out excavations and examination of remains in accordance with what General Cunningham and I, in consultation with the local authorities, may recommend.

Extract from a letter from CAPTAIN H. H. COLE, R.E., Curator of Ancient Monuments in India, to the Secretary to the Government of the Punjab, Public Works Department, dated Simla, 26th September 1881.

In reply to your letter No. 139 of the 19th instant, I have the honour to recommend that repairs to the following buildings be commenced:—

Jahangir's Tomb at Lahore.

Shahimār Gardens at Lahore.

The Kutub buildings and grounds, Delhi.

The ground Humayon's Tomb, Delhi.

2. The plans for these will be submitted in a few days. In the meanwhile I beg to strongly recommend that an application be made to the Lieutenant-Governor of the North-Western Provinces for permission to ask Mr. Heath to visit the buildings mentioned and to draw up the estimates.

Extract from a letter from CAPTAIN H. H. COLE, R.E., Curator of Ancient Monuments in India, to the Inspector General of Military Works, dated Simla, 2nd October 1881.

Referring to the letter No. 294B., dated the 8th instant, addressed to you by the Government of India, Public Works Department (a copy of which was forwarded to me for information), I have the honour to solicit your consideration of the various recommendations, referring to buildings in the Lahore and Delhi Forts, contained in my report * dated 10th May 1880 (see page xix).

* Copy enclosed.

2. I respectfully beg to recommend that the works be put in hand as soon as possible. The plans and drawings alluded to in the report will in a few days be ready to be submitted to you. In the meanwhile I would suggest your applying to the Government of India for a grant of Rs 10,000 for the Delhi Fort buildings, and of Rs. 5,000 for the Lahore Fort buildings.

3. Mr. Heath, Executive Engineer of the Archaeological Division, North-Western Provinces, will probably be employed at Lahore and Delhi by the Punjab Government in the repair of buildings; and I strongly recommend that advantage be taken of his experience to execute the works in the Forts at those places.

4. I have suggested to the Punjab Government the propriety of procuring Mr. Heath's services; and recommended his deputation to Simla for the purpose of framing estimates from the plans in my office.

Extract from a letter from CAPTAIN H. H. COLE, R.E., Curator of Ancient Monuments in India, to the Inspector General of Military Works, dated 1st February 1882.

Referring to my letter No. 448 of 3rd October 1881, I have the honour to suggest the following preliminary measures:—

2. *Lahore Fort—Diwan-i-am.*—The provision of other barrack accommodation may take some time to arrange, but I strongly recommend that the painted apartments in rear of the throne be evacuated and all colour or whitewashing prohibited.

Kheab-gah.—To be cleared of its church fittings.

Jahangir's buildings.—Used as a Roman Catholic chapel and staff quarters; to be evacuated, and the sculptured columns freed of the whitewash and enclosing walls.

Delhi Fort—Diwan-i-am.—I recommend the removal of the curtain. A drawing showing the original mosaic behind the throne is in hand, and will be submitted.

3. *Diwan-i-khas.*—The roof to be strengthened from the top by the insertion of iron joists. The present painted wood ceiling to be rendered secure, and renewed where the wooden panels and mouldings have been removed. An estimate for repainting the coloured ceiling at the rate of Rs. 1.8 per square foot by Ismail Khan, miniature painter, Chandni Chauk, Delhi, seems to me worthy of consideration; but it would, I think, be prudent to have a sample painted at one corner for approval, which would also serve as a master for the rest of the work. Only the central ceiling requires repainting.

Sawan and Bhaden.—These pavilions are used for serving out rations and for a gymnasium, and should, I submit, be cleared and cleaned.

4. The following plans and drawings are forwarded by post; but I hope that they will be returned as soon as done with, as they are required for purposes of illustration:—

- (1) Plan of Delhi Fort (buildings of interest coloured red).
- (2) Pavilion called Sawan in the Delhi Fort (Bhaden is a similar pavilion).
- (3) Painted ceiling in the Diwan-i-khas—Delhi Fort.
- (4) Plan of Lahore Fort (buildings of interest coloured).
- (5) Diwan-i-am in the Lahore Fort, as it is.
- (6) Diwan-i-am in the Lahore Fort, as it was.
- (7) Khwab-gah in the Lahore Fort.

5. Some notes on the condition of buildings of historical and artistic interest at Lahore and Delhi are enclosed.

Lahore Fort.

Diwan-i-am.—The original railing which was in front of the building has all been removed, with the exception of a few uprights. The steps, too, have all disappeared.

Of the building itself, the open pavilion has been enclosed with walls on the west and east and by a verandah on the south, and whitewashed.

There is a cornice running round the building, which has evidently taken the place of the original *chirja*. The present parapet wall, too, is evidently new.

Rooms at back.—Lower floor only passages. Upper floor rooms used for meals. All the walls whitewashed.

Outer verandah and room F.

The ceiling has not been interfered with, but the centre flower has been removed in nearly

every case.

The plaster ceiling has been taken down in the rooms marked A A, and the vaulted masonry exposed, showing large cracks. Flooring in good order.

A brick parapet wall has been put up between the columns on the north side in place of the original railing. Flooring in fair order.

Open pavilions.

The ceiling over the inner room (B) is being disintegrated through damp getting to it, as also some of the coying, measuring 21 feet; and another portion 5 feet long. There are two cracks across the room at the back, and a single crack from end to end in the open pavilion.

The marble dado in fair order, except portions missing measuring $3' \times 3' 9''$ and $10' 9'' \times 9''$. The ceiling is destroyed with the exception of a few pieces. The centre ornament completely gone, but no cracks perceptible.

Room C.

The marble dado nearly all gone; only a few slabs remain. The ceiling cracked in several places, and looks unsafe. The marble columns are very dirty in the throne and galleries. The perforated stone railing between the columns has been removed where marked with the letter a in plan.

Rooms D and E.

The small kiosk on the roof has been blocked up on all sides and door let in on one side.

The whole has been whitewashed.

Khwab-gah.—Outside pavement worn and damaged.

The exterior of the building is in good preservation and intact, but a thickness of 6 inches has been added to the parapet wall.

Inside the open archways have been filled in with wooden door frames. Flooring in tolerably good condition, but a good deal worn, particularly the grey stone.

Recesses—No. 1, plain slabs; No. 2, inlaid with mathematical figures, damaged in places; No. 3, in fair order, but a few stones removed from the paving. The baptismal font is placed here. No. 4, same as No. 2. No. 5, only plaster flooring now.

The perforated screen work in these recesses is in good order.

The old roof has been removed.

Small pavilion outside the Shish Mahal.—The outside is in good order.

The red sandstone paving of the outer platform is sealing off.

The flooring inside is of plaster, except at the north end, measuring $14' 3'' \times 4' 3''$. In the centre of this was a *matam* $5' \times 4' 3''$ (now filled up), and the side portion of marble with a border of inlaid work.

The wall on the west side has a marble dado $3' 9''$ high, gilded and painted. Above this dado the wall was painted, but now in a damaged condition.

The ceiling has sunk in the middle about 6". A portion at the north end is of sheet copper 15' x 3', the centre portion of which is plain; but the border is a raised flowered pattern.

Shish Mahal.—The flooring of the open courtyard facing the Shish Mahal is worn and broken, as also that of the fountain.

There is a low parapet wall of brick masonry round the fountain, which seems to have been lately put up.

Armoury.—Flooring of open verandah at south-east corner broken up.

The long room in use as a store for keeping old Sikh weapons. The doorways have glazed frames.

Naulakha Burj.—The plinth is in good order, except where marked.

Exterior. The steps are bad, and seem to have been put up recently.

The lower panels are in good order, plain marble. The panels marked A and B are in a ruined condition, only a few stones of the inlaid work remain. The stone-work has been removed altogether from the two panels C and D on the opposite side of the doorway. The border between these panels is in fair order, but many stones removed from it. Above the sash line of the door is all plain plaster work.

(Front).—Only a few stones remain of the inlaid work in the panel marked E. Panel F taken out badly and plaster substituted.

East side. In the panels G and H only a few stones remain. The panels above and below these are of plain white marble, and are in fair order.

The stone beam spanning the entrance has cracked in two. There are other cracks, as shown on the drawing; the border between the panels is in good order.

In the panels corresponding to A, B, C and D only a few stones remain of the inlaid work. The panels above and below are plain. The border is in order. The chujja and brackets on the south end are of wood; as also a portion at the north-west corner.

North end. The south-east corner seems to have been recently rebuilt. Flooring of lime mortar; is in fair order.

Inside.

All the flowers in the inlaid work of the dado have been removed. About half of the mosaic border has been removed, and putty and paint substituted; the remainder is in fair order. The painted work in the panels above this is in fair order. The portion above the doorways is in good preservation.

The ceiling is cracked in several places.

Of the inlaid work on the marble columns, very few stones are left on the bases; but the work on the capitals is in fair preservation.

Two open pavilions on either side of the Naulakha Burj.—Flooring broken up. Beam across opening at north end cracked in three places; a pipal tree has taken root at the

Pavilion on the south side. back of the wall, as shewn on the elevation.

Pavilion on the north side of the Naulakha Burj. The whole in fair order.

The inlaid work on the bases of the marble columns has been damaged

and most of the stones removed, otherwise the rooms in the lower floor are in good order. But the rooms on the upper floor are in disrepair and dirty.

Shish Mahal.

Moti Masjid.—Flooring in fair order, but a *pipal* tree has taken root at a (marked on ground floor plan), and upheaved the slabs round it. The flooring has also bulged out in two places marked + +, evidently caused by the roots of the same tree. The black marble inlaid work on the outside walls is damaged in several places.

On the south dome is a *pipal* tree (b) on plan shown in elevation, which is causing the slabs to be lifted up from their beds. The same is being done by the roots of a tree (c) which has taken root in the middle dome. There are a few more small trees on the roof, and one of good size at (d).

The inside is in fair order and kept in repair. The open archways outside have been built up and doors and windows let in. The entrance lobby is in a neglected state; the plaster has fallen off and the flooring is in a bad state.

A *pipal* tree is growing up against the entrance steps.

Shahlimar Gardens near Lahore.

The alcove at south-west corner.—Inside plastering all gone, as also from top of cupola. This wall is in a ruined condition.

The portion immediately adjoining the pavilion leans over, to a distance of 373' on the south and 200' on the north side. The brick-on-edge terrace is in a very bad condition, especially 170' of it to the south. The small wicket (76 feet from south-west corner) has been blocked up, the arch having fallen in; a similar wicket has been blocked up on the other side of the pavilion used by natives. The terrace on the north side of this pavilion is in fair order.

The alcove beyond this pavilion is in a very bad condition. The chujja work has fallen away; the plaster on the ceiling is falling off.

The wall beyond this alcove is bent in the shape of an S for a distance of 233 feet.

The terrace along this portion has sunk and is in a very bad condition. The remainder of the wall on this side is vertical, though shaky; the plastering has peeled off.

The terrace beyond this up to the gateway D is in fair condition, but sunk in places.

There is a good deal of vegetation springing up on the wall near the gateway.

The tilework in the spandrels of the large archway on the inside has been removed. Four panels are in fair condition.

Of the remaining fifteen, the tilework has been totally removed from eleven and the other four are in a very bad state. In the soffit, ten patterns are gone, the remainder are in fair order.

The south pinnacle on this gate leans to one side.

Gateway D with tilework.

The terrace beyond has sunk very low in consequence of water having lodged.

The alcove at the north-west corner is in a ruined state, the chujja work has been removed; the old ceiling on the lower rooms was removed and been replaced with one of reeds; the roof rests on rough 'bullies' (saplings).

In fair condition, but the plaster gone $\frac{1}{2}$ feet from the ground; the upper portion is falling. The pavement has sunk and been destroyed all along this wall.

North wall.

The pavilion on this side has been repaired lately in a rough way. The roof rests on beams and burgahs. The old staircases on either side, leading to the terrace on the roof, are in a ruinous condition.

There are traces of a staircase in the floor of this pavilion which led to the garden on the north side of the present one. This staircase and passage have been blocked up.

The alcove at the north-east corner is in fair condition.

Portion between north-east corner and gateway E in a bad condition; plaster falling. The gateway E is in a ruined state. Of the tilework in the front elevation only 74

East wall.

panels remain.

The spandrels are destroyed; tilework gone. On the inside the tilework is destroyed to a height of 3 feet on the north, and 6 feet on the south. Also at the crown portions are gone. A portion of the wall between this gate and the hammam has been repaired. The remaining portion (246 feet) is in a bad condition. The high wall leans over for a distance of 110 feet from its end. The portion adjoining the hammam is vertical, but the plastering has gone.

The dome over the alcove at this point shows a large crack. The chujja work is destroyed.

The columns of the balcony have all split above the springing line, and the whole weight of the balcony now rests on a wall recently built up. The original cantilevers evidently gave way.

The gateway near this alcove is in a dangerous condition. It does not seem to be in use now as a thoroughfare.

The wall beyond to the south-east corner is in a bad condition. The paving too is bad.

South wall.

Has lost much of its plaster.

The entrance steps broken in parts. Entrance corridor is in fair order; plaster bad. The two outer doors are rough and seem to

The Hammam.

have been put up recently; flooring of all the rooms is broken up in places; plastering in fair order, but the whole dirty.

Wall running east and west, between the two alcoves Q and R, in disrepair. The cornice broken in several places.

The paving along this wall is worn out. The stone facing is all scaling off.

A portion of the railing (15 feet) on the west side of the pavilion, together with the upper wall, have been upheaved on account of the vegetation taking root.

The brick terrace on the west side of the centre pavilion has sunk on account of water lodging.

The terrace along the channel has sunk in several places. A portion of the flower beds round the large tree (a) has been upheaved.

The original railing on the upper terrace seems to have been removed.

Pavilion 1.

In good order, but the marble dado has been removed in many places.

The brick-on-edge terrace along the channel has sunk in several places.

South entrance. In fair order. The marble dado has been removed in several places. All the pavilions round the large tank, as also the one at the south entrance, have been repaired and whitewashed.

Shahdara near Lahore.

Jahangir's Tomb.—The paving on the platform on which the tomb rests is in a very bad condition. The red sandstone facing

Platform.

of the plinth has been removed. A portion of the paving measuring 1' x 38' x 10' on the south has been removed.

There is a good deal of vegetation springing up on the walls and minarets of the tomb itself. A small pipal has taken root on the soffit of an arch on the south-eastern corner.

Outer arcade of the tomb.

Flooring in tolerable order. Broken in places colored sepia on ground plan, measuring—

1'	x	20'	x	10"	} in south verandah.
1'	x	13' 6"	x	7'	
1'	x	6'	x	10'	} in east verandah.
1'	x	6'	x	6'	

The nosing of the plinth is chipped and broken.

Inner rooms of the tomb opening on to the verandah.

Flooring of all in a bad condition.

Plaster in fair condition, whitewashed. There is a large crack in the vaulted ceiling (shown in plan).

The stone bressumers across the door-ways have all cracked in two.

Only two of the old doors remain. But a number of new ones have been recently put in.

I.—Leading from the west side. Flooring in good order. Tilework in fair

Corridors leading to the central apartment.

order, but dirty. A portion removed and replaced with plaster, measuring—

1'	x	5'	x	2'
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Upper portion of walls colored washed a dirty brown.

The ceilings are cracked from end to end. Arches in the same state.

The entrance door in a dilapidated state.

II.—Leading in from south side.

Flooring.		Removed as shown in plan and measuring—		
1'	×	15'	×	11'
1'	×	25'	×	3'
1'	×	17'	×	4'

Tilework in fair order; damaged in places, measuring—

11'	×	3' 6"	×	0"
2'	×	1'	×	1'
1'	×	2' 6"	×	3'
1'	×	4'	×	1'

Fresco-work. Patched in several places, measuring—

1'	×	4'	×	4'
1'	×	11'	×	3'
1'	×	8'	×	9'
1'	×	10'	×	11'
1'	×	10'	×	3'

A patch of ceiling is damaged measuring—

1'	×	11'	×	11'
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III.—Leading in from east side. Flooring in good order, except portions measuring—

1'	×	0'	×	4'
1'	×	5' 6"	×	2' 6"
1'	×	2' 6"	×	1' 6"

Tilework in fair order, but damaged in places, measuring—

1'	×	1'	×	1'
1'	×	2'	×	1'
1'	×	1' 6"	×	9"

Fresco. Damaged in places, i.e., coving, measuring—

1'	×	30'	×	2'
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Ceiling, measuring—

1'	×	20'	×	10'
1'	×	11'	×	11'
1'	×	10'	×	3'

IV.—Leading from north side.

Flooring damaged, measuring—

2'	×	5'	×	2'
1'	×	6'	×	3' 6"
1'	×	3'	×	2'
1'	×	5' 6"	×	2'

Tilework in fair order, except a piece measuring—

1'	×	3'	×	2'
----	---	----	---	----

Fresco in very damaged condition.

Ceiling cracked from end to end.

The centre room (in which stands the sarcophagus) is in good preservation, but the canopy of cloth under the skylight is very dirty and old.

Parapet wall of terrace covering the whole building has been recently built in place of the railing which was removed. The same remark applies to the parapet walls round the four minarets. Three steps broken in one minaret (south-eastern); flooring of terrace patched in several places.

The ceiling of the domes over the minarets is all gone.

The base of the wall for a height of about 4 feet is in a ruined condition

Garden wall. The plaster has fallen off, and saltpetre is causing the bricks to crumble away. There are the remains of boulder-paved walks all round.

This wall is completely undermined for a distance of 100 feet from the north-western corner. The alcove is also undermined through the bricks crumbling away. The plastering of the ceiling is falling off; the steps are broken.

Undermined to a height of 4' from base, to the centre building 703' from the corner. This building had been converted into a dwelling-house for railway employes. The interior is in fair order, but the outside walls are in a bad condition.

The alcove at the north-east corner is crumbling away. The dome is in disrepair.

Both sides of the wall crumbling at base, 4' from ground, to a distance of 310' from north-east corner. The remainder of the wall, together with the baradari on this side, have been destroyed by the encroachment of the river Ravi.

East wall. About 550' destroyed from south-eastern corner.

The building in the centre of this wall is in good condition. It was converted into a dwelling; the outside of the wall is crumbling away.

Good condition for 100' from south-west corner. At this point there is a large crack, showing where the wall has sunk; beyond this the lower portion is crumbling.

West wall.

Four of the cisterns (B), (D), (G) and (E) are in fair order, the others in ruins.

[N.B.—The garden is only kept up round the tomb. The other beds are let out for cultivation.]

Old Seral, Shahdara.

Completely ruined. A few rooms above are habitable; the lower portion crumbling away. The out-offices in the whole enclosure are in a ruined state, and falling in

South entrance.

several places.

Front face stones are loose and falling. The plaster lining of the large archway completely fallen in. Inside had been repaired and made habitable.

Building (formerly *amra*) on west side.

North entrance.

In a dilapidated state; a few rooms made habitable in the upper floor.

Front in fair order, but many panels are falling and others have fallen. Rooms in the lower and upper floors have been repaired and used for offices.

East entrance.

Tomb of Asaf Khan at Shahdara.

The side buildings in this enclosure have been repaired and made habitable. The enclosure walls are in much the same state as those round the garden in Jahangir's Tomb.

The tomb itself is in a very dilapidated state. The outer shell of slabs has been completely removed, as also the slabs from the flooring; only a few left in the plinth. The tombstone is in a ruined and neglected condition.

Some of the tilework still exists in the arched doorways.

Chauburji, Lahore.

Broken up and destroyed. The north-west minaret and corner fallen and destroyed. The plaster from inside has fallen away. The plaster in the side recesses of the east elevation (facing road) all gone, same for spandrels in the main archways. The portions marked with the letter A show where the tilework has fallen off. The north-east minaret is in fair order, but the brickwork is exposed where marked B.

Floor.

North elevation.

tiles having scaled off.

The tilework on this side has been damaged by exposure to the weather, the colored surface of the

West elevation.

Outer surface in fair order, but the inside shows cracks and looks unsafe.

Tilework destroyed as marked in drawing. The wall on this side shows a large crack, and the minaret at the south-west corner seems to be sinking. There was a bush growing out of the wall near the south-east minaret.

South elevation.

Mosque of Wazir Khan, Lahore.

The flooring in the open courtyard is in tolerably good condition, except where marked A A in plan. The perforated brickwork round the cistern is worn. The flooring inside the mosque is in fair order. The plaster inside has fallen away to a height of about two feet, with portions remaining in a few places. The cornices below the springing line is nearly all gone. The arches over the entrances have all cracked at the crown. The domes seem to be sound, except at the south-east corner. At this point there is a large crack, evidently caused through the foundations sinking at the corner. The tilework on the walls outside is in fair order, except parts defaced as shown in drawings. That on the domes of the minarets is nearly all destroyed. The pinnacles which were on those domes have fallen down or been removed. The railing of perforated brickwork on the minarets is in an unsafe condition.

The small tomb in the open courtyard is in a neglected state. The tilework on the courtyard walls is in fair order, except about 20 feet of the work on the parapet wall on the north side, which has been defaced, also the tiles from an archway and spandrels on the south wall, removed badly. The plaster with imitation painting is in disrepair.

Entrance gateway on the east side. The plaster from the plinth has fallen off to a height of about 3 feet. The portion above this is in fair order, but dirty. The corridors on either side are in a ruined condition.

Gate of Golahi Bagh.—South face towards road; plaster of plinth gone. The tilework in good order, except where shown as destroyed in the drawings. The plaster of the entrance archway has been recently renewed. The plaster of the centre room has fallen away. The fresco work in this gate has been destroyed in places by the plaster falling off, and has been blackened by smoke in others. The arches have all cracked at the crown. The back of the gateway has been blocked up with a brick wall.

The fresco paintings have been destroyed to a height of about 4 feet; above this the work is in fair order, but dirty. The four pinnacles which stood at the corners over the parapet wall have fallen.

West face.—Most of the plaster fallen away, and nearly all the tilework, with the exception of two patches measuring 9' x 1' and 4' x 1'.

East face.—Same as west face.

Back or inner face.—The plaster and tilework all gone.

Mosque of Begampur.

The front of this building is in fair condition, but damaged in parts as shown on the elevation. The interior is in a very neglected state. The flooring no longer exists.

The dado was originally of tilework; the walls above this were painted. Very little now remains of the tilework; the walls have been whitewashed. All arches show cracks at the crown. The plaster of the ceiling has fallen off.

Delhi Fort.

Flooring in good order. The original flooring stones seem to have been replaced by inferior ones.

Dewan-i-Khas.

Mosaic work.

The following tabular statement shows the present condition:—

[N.B.—The letters and figures refer to corresponding marks in detail drawings showing where the number of stones have been reproduced, with a composition of cement.]

Letters and figures— <i>vide</i> plate.	No. 1 ON NORTH ROW OF PILLARS.		No. 2 Row.		No. 3 Row.		No. 4 Row.		No. 5 Row.		No. 6 ON NORTH ROW.	
	Missing parts.	Filled with composition.	Missing parts.	Filled with composition.	Missing parts.	Filled with composition.	Missing parts.	Filled with composition.	Missing parts.	Filled with composition.	Missing parts.	Filled with composition.
A	1	2	2	16	2	11	3	11	2	15	2	1
B	2	2	2	10	0	0	1	13	2	16	4	0
C	2	1	4	14	0	14	2	11	2	16	4	0
D	1	2	0	10	0	14	2	12	1	17	0	4
E	1	2	0	18	1	12	2	11	1	16	1	2
F	1	2	0	18	0	14	2	12	2	16	2	1
G	2	1	1	17	1	13	1	13	0	18	2	2
H	0	2	0	16	0	12	1	11	0	18	0	2
J	0	6	0	17	0	11	0	12	0	17	0	4
1 to 11	0	0	0	65	0	54	0	66	0	78	0	44
12	0	4	0	18	0	14	0	13	0	18	0	4
13	0	4	0	18	0	10	2	11	0	17	1	3
14	0	4	1	17	0	8	3	10	0	17	1	3
15	0	4	0	18	0	14	0	14	0	19	0	4
16	0	4	1	17	0	11	1	13	0	17	0	4
17	2	1	1	17	0	10	1	11	0	17	1	3
Border round panel.	20	447	16	500	17	403	49	300	22	401	20	498
Flowers	3	401	10	603	5	328	10	407	21	501	11	342
Leaves	21	120	...	...	...	...	...	...	...	...	24	136
Panel facing towards the shorter side of the building.	17	25	...	...	...	...	...	...	...	...	2	20

Of the narrow panels two are intact. The remainder have all the stones removed.

Gold leaf work.

In tolerable preservation.

Centre hall. The ceiling on the south side has sunk below the cornice to a depth of about $\frac{1}{2}$ inches. The original painted work is covered. What now remains was done recently and is incorrect. The ceiling of the outer colonnade is in better condition. The painted work in this is what was originally done. It has been damaged in several places through the leaking of the roof. The spandrel of the centre archway on the south side shows a number of cracks.

Hammam.—*Rooms lettered in plan.*—All the stones from the flowers wanting, as also from the buds; the leaves and stalks intact.

Mosaic work in dado.

Walls (above the dado) and ceilings white-

washed in all the rooms.

Room A.

Flooring in pretty fair order, except where some of the flags have been removed.

Room B.

Same as above. Corridor between B and C in good condition.

Flooring in good preservation. Inlaid work in floor; a few flowers remain intact, others all gone; but the stalks and leaves intact.

Room C.

Room D.

Same remarks as C. The slabs round the fountain are loose in their beds.

Corridor between D and G. Flooring in fair order; walls whitewashed. The red sandstone flags in the ceiling are scaling off.

Room E.

Flooring repaired; walls and ceilings white-washed.

Room F.

Flooring in fair order, as also cistern.

Same as F. The cistern in this room is in a ruined condition. All the stones from inlaid work have been removed, only two or three remain.

Room G.

Room H.

Flooring in fair order. Cistern in much the same condition as the one in the room G.

[*N.B.*—The three cisterns in the above rooms (F, G and H) are said to have been brought from the gardens of the Fort. These were in use as purely sitting rooms.]

Moh' Masjid.—The flooring in the open courtyard is in fair order; but the slabs from the fountain bed have been removed.

Flooring inside the mosque in good order. Some stones from the inlaid work removed. A new panel (the top one) of the entrance door has been recently put in. The outer walls round this mosque are said to have been built after the mutiny.

Samma' Burj.—*Flooring.*—North verandah. Portions on either side of the channel in a very bad condition. East corner room is sunk in several places. The flooring flags are all worn and scaling away.

Walls and ceilings.—North verandah plaster in disrepair. One of the stone flags in the ceiling (the centre one) is cracked and unsafe.

Room at north-east corner. Ceiling shows a crack along the middle.

Room under dome. Mosaic work. The stones from all the flowers removed, only leaves and stalks remain intact. Small bay-window on east side. Painting in the ceiling obliterated. The railing between the columns gone.

The other rooms in this building in fair order, except the mosaic work of which the flowers have been removed; the stalks, buds, and leaves are nearly all intact.

Dewan-i-aw.—Flooring flags worn and scaling away. There are marks of a stone railing which existed between the outer columns. The steps on the west side are worn and chipped. The flags on the face of the east wall are scaling off, as also the stone pilasters along this wall. A portion of the coving has been broken.

The detailed drawing of the Peacock Throne mosaic work shows where stones are missing.

Nakkār Khana.—This building is in good condition, as it is constantly repaired, except the two recesses on the east face, which are both in a dangerous condition. The joints between the slabs lining the arched roof have opened and the whole threatens to fall in. The elevation shows where slabs are split and broken.

"*Sawan*" and "*Bhadon*."—Flooring in fair order. The wall and ceiling whitewashed. All the stones in the mosaic work on this wall have been taken out. A store had been formed on the south side as shown in plan by building up mud walls between the columns. This room was in use as a godown for the Commissariat contractor. A portion of the cornice has been damaged on the east side; also one of the columns (marked on elevation) shows where a round shot struck it.

The pavilion on the opposite side similar to the above, called "*Bhadon*," is in use as a gymnasium. The flagged flooring has been taken up and plaster flooring substituted. The wall at the back has been whitewashed, as also the ceiling. The stones from the mosaic work have all been removed.

Zinat-ul-Masjid, Delhi.

The flooring of the open courtyard is all worn and overgrown with grass and jungle. The flooring inside the mosque is in good order. The plaster has fallen in places. The recesses in the west wall have been opened out, and open brickwork put in for ventilation. A lean-to has been put up on the outside to protect this wall. The domes are overgrown with *sis* and *pipal* trees.

The buildings adjoining the mosque and intended for travellers are in a ruined state.

Kalan Masjid, Delhi.

Flooring broken up and worn, except in centre court. The plaster has fallen from the walls and ceiling. A portion of walling has fallen on the north-east side measuring 10' x 10' x 2'. All the roofs are in a very unsafe condition, and leak very much during the rains, through the outside plaster having been destroyed. The dome and vaulted roofs show large cracks. The whole roof is overgrown with vegetation.

Fatehpuri Masjid, Delhi.

Flooring is all worn and broken up, but undergoing repairs. Intermediate supports have been put up (as shown in plan) to support the roof which threatened to come down. The *chajja* work has been shortened and only a coving remains. The present kiosks over the minarets were put up recently in place of the original ones. There are a number of *pipal* trees over the dome, which is now plastered and whitewashed. It is said to have been originally covered with blue tilework.

Purana Kila (Old Fort), near Delhi.

Outer courtyard overgrown with grass and jungle. Floors all broken up.

West wall.—Niches lettered on plan.

A.—In fair order, but very dirty. The ceiling shows a crack in the north-west corner.

B.—Damaged in places; otherwise in fair order, but requires cleaning up.

C.—Centre. The fringe of carved flowers along the arch broken away in parts as shown in drawing; otherwise in fair order.

D.—A good deal of the inlaid work damaged, particularly two patches measuring $1' \times 6' \times 3'$ and $1' \times 5' \times 3'$.

E.—In good order, and seems to be in use for worship. There is a crack here similar to the one in A.

End walls, north and south.—The middle arch in these walls show cracks; otherwise they are all right.

The cross arch between C and D shows a gaping crack as marked in cross-section.

Front wall.—Archways on the south of the centre opening cracked at crown; the others seem to be sound. The parapet wall over this wall repaired about 9 years ago. The bases of the pillars at the south end seem to be crushing. The inlaid work in front is a good deal damaged. All the ceilings show large cracks and look unsafe.

Roof.—The gallery along the back portion shows a crack in the vaulted roof from end to end. The roof is all overgrown with grass and jungle.

Humayun's Tomb (near Delhi).

Fair order, but the recesses very dirty. The minarets which existed on the east side have fallen. A portion of the wall

West gate. adjoining (on the north side) has fallen down, as marked (a) in plan. Remainder of the wall up to the north-west corner in tolerable preservation inside, but the back of the wall crumbling away. The bastion at this corner in ruins.

In pretty fair order. The building A in the centre of this wall is dirty and in disrepair. The building B at the north-east corner is in ruins.

North wall.

East wall.

The whole of this wall as well as the building C is in a ruined state.

South wall.

Fallen, as shown in plan, to within 160 feet of the south gateway; remainder in tolerable order. A portion was removed, as shown dotted in plan. The south gateway has been repaired and converted into a rest-house for the police officers.

There are the remains of a small mosque as shown at (d). The bastion at the south-west corner is in a ruined state. The wall between this corner and the gateway has fallen as shown at (b) and (c).

Of the original walls and cisterns very little now remains. The garden, too, is overgrown with vegetation. Only the portion between the west gateway and the tomb is kept up; the other portion is all farmed out for cultivation. There is an old tomb in the south-east corner as shown in the plan. This tomb as well as the one outside the enclosure have some fine specimens of incised work in the ceiling, but both are in a very neglected state and falling to ruins. The tomb of Humayun itself is in fair preservation, but a number of small pipal trees have taken root on the top terrace and dome. The minarets from most of the corner pavilions have fallen. A portion of the chujja work, about 6 feet, has fallen from one of these pavilions (north side). The perforated screen work in the windows is damaged in a few places.

The railing on the terrace has fallen or been removed in several places, measuring—

South side 1×30 feet.

East side 1×350 "

North side 1×40 "

The walls in the basement show extensive cracks from end to end on all four sides, evidently caused by the outer walls sinking.

Kutub (near Delhi).

The Jamali Kamati Tomb.—The paving outside is worn and broken up in parts.

Outside.

The whole of the enclosure is overgrown with jungle. The plaster from the outside walls has nearly all fallen, and very little of the tilework remains; portion of tilework exists over the south entrance, but is covered with mud. The chujja work looks unsafe and liable to come down; a length of 15' of it has fallen. A small tree has taken root over the north parapet wall.

The tilework in the dado is destroyed in parts, measuring about 52' \times 3'.

Inside.

The plaster above the dado nearly all gone.

Border round recesses 37' destroyed; that along the top of wall 18' destroyed. The incised work in the ceiling is in good preservation, but dirty. The patterns have been covered by visitors with red ochre for the purpose of obtaining impressions on paper.

Tomb of Fazelulla Khan. *Flooring all broken up and destroyed.*—A in fair

Recesses.

order, but dirty; a good portion of the border stone along the archway is missing.

B.—Same remarks as above. Centre recess damaged considerably by boys who are in the habit of throwing stones at the carved pendants and flowers.

The two recesses (C and D) corresponding to A and B have been removed badly. The inner shell of stone forming the ceiling to the four side domes has all fallen in. The ceiling of the centre dome remains, but there is a gaping crack in the dome itself. The fringe of carved work on the large entrance archway is considerably damaged. The minarets on either side of the main entrance as well as those that existed on the corners have fallen down; also the parapet wall along the front, and the whole is now overgrown with grass and jungle. The staircases are in a ruined condition; most of the steps are either loose or broken.

The whole enclosure is in a neglected state, and overgrown with jungle. The walls round the compound are crumbling away.

Note on works in progress in the Punjab, dated 19th September 1882.

1. The Report of the 10th May 1880 (see page xix) specifies what are the obvious remedies at Lahore and Delhi, whilst the subsequent correspondence with the Punjab Government and Inspector-General of Military Works, quoted in this Appendix, shews what I recommended.

2. Since then repairs have been commenced to Jahangir's tomb at Shahdara, on which about Rs. 5,000 were expended last year. The importance of this monument will be appreciated from the engravings and chromo-lithographs circulated with this volume. They have been reproduced from drawings made in my Office, and are part of the experimental publications sanctioned by Government, and referred to in paragraph 74, page 12.

3. In July 1881, Sir Robert Egerton sanctioned repairs to the principal gateway of the Sarai at Nur Mahal. I inspected this in February last, and had the place surveyed and photographed. Heliogravures of the gateway are submitted with this. The repairs are now in progress, but I have not yet inspected them.

4. A reference was made to me by Government concerning a proposal to alter and remove some of the old gateways of Delhi, and I inspected them in July 1881, and submitted a report advocating their being left intact. A subsequent decision of Government confirmed this view, and orders were passed accordingly.

5. The recommendations offered by me in August 1881, in reference to monuments in the Peshawar district (see page cxxxv), resulted in some excavations. General Cunningham had sole direction of the operations. I visited the localities as well as some others in Eusofzai, and addressed the following memorandum to the Punjab Government:—

Memorandum on Ancient Monuments in the Peshawar District, dated 19th June 1882.

During my visit to Peshawar and the Eusofzai district in February last, I had an opportunity of inspecting the very interesting ruins which General Cunningham had selected for exploration.

1. Reaching Peshawar on the 6th February, I had the advantage of conferring with Mr. Cordery, the Commissioner, and learnt from him that Lieutenant Martin, R.E., had just left for Charsaddah with a company of sappers.

2. On the 9th February I accompanied Mr. Beckett, the Deputy Commissioner (who is intimately acquainted with the Eusofzai district), to Hatt Marlan, and meeting Mr. Robinson, the Assistant Commissioner, received the greatest assistance during my stay in Eusofzai. On the 11th February Mr. Robinson and I rode out through Shahbazgarhi to Shewa, the following day visiting Hanigat and riding round the north side of the Karanar hill to Bakhshali. At Shewa we were hospitably entertained by Muhammad Umar Khan, and occupied the principal room in his house, one end being slightly raised and raised off with a quaint wooden railing of geometric tracery. At Bakhshali we put up in the village guest-house, a shed of mud and thatch, but preferable to tents in the keen climate which prevails at the time of year.

On the 14th February I visited the Takht-i-Bahl, and on the 15th rode to Lieutenant Martin's camp at Charsaddah, where I stayed a night.

3. The following are the points which occurred to me at the various places, and which I commend to the notice of the Punjab Government:—

Inscription at Shahbazgarhi.—This inscription has been fully described by Major-General Cunningham in Volume V, page 19, Archaeological Survey of India. He thus mentions it:—

"The great inscription of Asoka is engraved on a large shapeless mass of trap rock lying about 80 feet up the slope of the hill, with its western face looking downwards the village of Shahbazgarhi. The greater portion of the inscription is on the eastern face of the rock looking up the hill, but all the latter part which contains the names of the Greek kings is on the western face. The mass of rock is 24 feet long and about 10 feet in height, with a general thickness of about 10 feet."

The inscription is not in a good state of preservation, as the surface of the rock is rough and exposed to weather. The only way, in my opinion, of preserving the record is by an impression of the whole inscribed surface.

The village headmen should be made responsible that no wilful damage is done to the inscription.

Rasigat near Nogram.—The ruined fortress on the hill of Rasigat is beyond the British frontier in the Khudo Kheyli country. Both Lewenthal, General Cunningham and Dr. Beller have described it; but no systematic survey or examination has been made to reveal the condition of the various buildings. General Cunningham gives a rough plan at page 103, and a sketch of the fort at page 107 of Volume II, Archaeological Survey.

The patches of shrubs and trees which conceal the walls should be removed, and the outlines of the buildings carefully laid bare, so as to permit of an accurate plan being made before any extensive removal of earth.

A few surface excavations have been made, and small fragments of broken statues, &c., cover the surface of the ground. Some of these are represented in the accompanying illustration, and give an idea of the general character of the carvings, and their resemblance to Greek sculpture.

The village of Nogram was deserted at the time of my visit, on account of fights between the sections of the Khudo Kheyli; but I understand that the civil authorities could make arrangements with the tribe for the supply of labour for excavations. It would, I think, be necessary to pay the men a small daily wage, and also to give rewards for remains excavated and delivered perfect and unutilized. Care would be necessary to prevent damage in laying bare the walls of the buildings. On completion of the work and removal of the valuable stones, an agreement should be made with the tribe to prevent wilful damage to the fortress ruins.

Kusumar Hill.—The ruined monasteries, which seem very numerous along this mountain range, are so inaccessible on the steep scarp of the hill that there seems little danger of damage being done wilfully by the natives.

I saw the buildings and tope at a distance only, during the ride from Shewa to Bahkhal.

Bahkhal.—This village is built on ruins, and some interesting discoveries were made lately. An old Sanskrit papyrus book being unearthed in a field was sent to General Cunningham for examination. Mr. Robinson also obtained an ancient pencil and stone lamp. This site would probably yield a good deal of interesting matter; but search can only be made voluntarily by the natives for rewards, as the greater part of the ruins are under the village houses.

Takht-i-Babi.—This prominent hill, which rises some 500 feet above the Kas-fai plain, is about eight miles from Mardan, and its ruins have been described by General Cunningham in Volume V of the Archaeological Survey, and by Dr. Beller in his Report on Rasufrai.

The ruins are very extensive and most interesting; the disposition of the monasteries and dwellings can be clearly traced from the upper points of the Takht-i-Babi range; but on near approach it becomes evident that great damage has been done by excavators and earthquakes. The digging has had but one object, namely, the ready removal of sculptures and statues, which adorned the cloisters and tope; added to this, earthquakes have overturned and rent the massive and lofty walls.

The only thing to be done at present is, in my opinion, to prohibit irregular and unauthorized excavations, and to have the place watched by the headmen of the neighbouring villages.

Charvaddah.—Close to the junction of the Swat with the Kabul river, and between the branches of the former stream, is a large fort called locally the Bala Hisar. General Cunningham identifies the locality as the position of Puskaravati mentioned in the 5th century A.D. by Hwen Tsang, and directed excavations in the fort and in mounds around the town of Charvaddah. The fort, which was evidently adapted by the Pathans, is too much ruined to be of any value for purposes of conservation. Lieutenant Martin, who was here at work with a field company of sappers, revealed the principal entrances into the stronghold and some curious irrigation channels of excellent pottery leading from an ancient well. He also found in neighbouring mounds some fragments of Greco-Buddhist sculptures similar to those already transported from the Peshawar district to the Lahore Museum—only smaller and more imperfect. They appeared to me valuable only from an archaeological point of view. The most remarkable sculpture shown to me by Lieutenant Martin was a small stone seated or harnessed horse.

5. The conclusions I arrived at during this visit are as follows:—

There are objections to the employment of Pathan sappers in making excavations:—

- (a) Their religion encourages them to deface figure carvings.
- (b) Their work depends on the interest which the officer commanding takes in archaeology.
- (c) The presence of small bodies of soldiers at remote parts of the frontier is apt to tempt the tribes (who are generally at feud with each other) to embolden their enemies in difficulties with the British, easily brought about by a single shot.

6. I am therefore of the opinion that the more efficient manner of securing the preservation of the interesting remains which abound in the Kabul valley is to enlist the people themselves in the work, making it their interest to produce perfect and unimpaired sculptures or other antiquities.

There are, I submit, two ways of doing this—

1st, by placing a sum of money at the disposal of the civil authorities, to be applied in small rewards for perfect specimens of inscriptions, carvings, statuary, coins, or relics of any kind. An annual grant of about Rs. 1,000 would, I think, produce considerable results.

2nd, by systematically removing sculptures, &c., from particular localities, rich in remains, by means of an organized gang of the tribes people.

It would be necessary to provide for superintendence, and to send a responsible person to survey, lay out the tasks, and pay for labour.

7. It is generally agreed that Bamiyan would be likely to yield valuable discoveries, and a native with local knowledge would probably be the best supervisor. He should know how to measure and make plans of buildings, and learn how to take impressions of inscriptions in gutta-percha paper, &c. It would be best for him to be directly under the civil authorities in the district, but I would direct the technicalities of his operations, and inspect his work as occasion required.

A small grant of Rs. 2,000 would probably cover such expenses.

8. As regards the interesting localities in the district, I recommend that the headmen of villages, or influential natives, be made responsible for preventing damage; and the ruins at Jamal Gazi, Takh-i-Bahl, Sahar Bahl, Zawaldhar, and Khirka are particularly worthy of custody.

9. Some repairs and improvements have recently been carried out in the

Delhi Fort.

Delhi Fort under the Military Works Branch. Captain Turner, R.E., the Executive Engineer, has cleared and renovated the two pavilions referred to at page xxv (Hafiat Baksh) and at page xcix (Sawun and Bhulon). At the request of Colonel Holmes, R.E., the Superintending Engineer, I have prepared a design for a balcony to some quarters over the Delhi Gate of the Fort. At present the balcony is of wood and corrugated iron, and harmonises ill with the surroundings.

7. Humayun's Tomb near Delhi, and the tomb and mosque near the Kutub

Humayun's Tomb, Jamali Kamali.

known as Jamali Kamali, are in course of being rescued from neglect, and the grounds and structures put in order; but the work is at a standstill for want of allotment of funds.

8. The Fatehpuri Masjid in Delhi was purchased by Government at the time of the Delhi Assemblage, and given back to the Muhammadans. The buildings and

Fatehpuri Masjid.

enclosure were in a neglected condition when I made my report in 1880 (see page xxviii) but I am glad to say that this has been to a certain extent remedied, the enclosure having been cleaned up and planted, and some of the needful repairs executed in the mosque. More, however, remains to be done. At the request of the Commissioner of Delhi, Colonel Gordon Young, I have prepared a plan for building some additional houses round the enclosure of the mosque, and by the letting of these the mosque trustees will increase their income.

9. Wazir Khan's Mosque at Lahore has been surveyed, and the drawings will

Wazir Khan's Mosque.

show how artistically valuable this building is, and tend, I hope, to bring about better care of the building on the part of its owners.

10. The whole of the Punjab work has progressed slowly during 1881-82. The funds granted last year have now been withdrawn, and the employment of Mr. Heath, Executive Engineer, Archaeological Division, North-Western Provinces and Oudh, has not been found practicable. The work has consequently been delayed, pending the settlement of who should do it. A special officer, Lieutenant Abbott, R.E., has now been appointed by the Lieutenant-Governor, Sir C. Aitchison, and a contribution of Rs. 38,000 out of this year's grant has been made by the Supreme Government.

U

Report on Monuments in the North-Western Provinces and Oudh together with a Note on works undertaken.

Note on Allahabad, Benares, and Jaunpur, dated 11th January 1881.

1. *Buddhist Ldt in the Allahabad Fort.*—The Asoka Ldt in the Allahabad Fort in front of the Arsenal is one of the most interesting of its kind. It was re-erected in 1837, having been found lying on the ground. The Asoka inscriptions on it date 240 B.C. Those of Samudra Gupta date A.D. 380-400, and there is a Persian inscription of Jehangir's (A.D. 1605) from which it appears to have been re-erected to commemorate the accession of that Emperor. The base is 7 feet 7 inches, the shaft 35 feet, and the diameter at the top 2 feet 2 inches; at the base about 3 feet. Captain Smith, who re-erected the pillar in 1837, built up a pedestal, and translations of the inscription have been printed on paper glazed and fitted into the base. The writing is, however, almost illegible from damp and vegetation which has got behind the sheets of grass, and these notices might be replaced with advantage by some notices printed in enamel on metal.

2. *Akbar's Palace, Allahabad.*—Akbar's palace buildings in the Fort have been almost entirely obliterated. Those that remain have been adapted to the purposes of the arsenal; and the beautiful hall drawn by Daniell and represented in Fergusson's volume on Indian Architecture, page 583, has been so built up, enclosed and furnished with English doors and windows as to appear to be a building contemporaneous with the Ellenborough barracks outside the arsenal enclosure. The interior columns of the hall are whitewashed and enclosed by partitions in order to accommodate arsenal stores, and the building is past any redemption that would have any chance of being entertained.

3. *Akshay-Bat in the Allahabad Fort.*—The so-called underground temple near the arsenal (which is in reality only a building earthed up by accumulated debris) is the temple described by the Chinese traveller Hwen Thsang (A.D. 637). Originally, says General Cunningham, both tree and temple must have been on the natural ground level. The upper portion has long ago been removed, and the only access to the "Akshay-Bat," or "underlying Baume Tree," now available is by a flight of steps which leads down to a square pillared courtyard. This was once open to the sky, but is now closed to secure mystery and darkness. Hwen Thsang describes the temple as being in the midst of the city of Prayaga (Allahabad), which was situated at the confluence of the Jumna and Ganges, so that the Fort of *Allahabad* erected by Akbar (A.D. 1572) surrounded this ancient building, and probably was the means of preserving it from being swept away like all other evidences of the old city.

4. *Khusru Bagh, Allahabad.*—These gardens are near the railway station. The tombs of Sultan Khusru, the ill-fated son of Jahangir, of Khusru's mother and of his sister, are in fair preservation, but require (when it can be afforded) more thorough repair. The gardens are well kept up; they were laid out by Jahangir, and are surrounded by a masonry wall.

5. *Buddhist Tapa at Saranath, Benares.*—(Date about 6th Century A.D.)—This monument has been described by numerous people and is well known. General Cunningham writes about it at length in his Vol. I, Archaeological Report, pages 103-130. Mr. James Fergusson describes and illustrates it in his *History of Indian*

Architecture, pages 65—68. This interesting Tower, or "Dhamek Stupa" as it is called, is in a very ruinous condition. One side of the sculptured frieze is falling, and has been recently banked up with earth. *Nothing, however, can be done satisfactorily until the unsafe masonry is entirely rebuilt; and this should be done at once to prevent further damage.*

6. *Benares City*.—My visit was too short to permit of any careful examination of the buildings in the city, but a large number of ghats and buildings have been built on the river bank, and I propose to make a detailed report, as a great deal may be done in the way of improvement. For instance, one large ghat was commenced by the Maharaja Seindia, but it has sunk and become utterly unsightly, as if disturbed by an earthquake. This subsidence is no doubt due to bad foundations.

7. *Jaunpur*.—The country around Jaunpur became an independent Moslem province in 1397 A.D. and so remained until incorporated by Akbar in the Mogul Empire. The Jaunpur Rulers adorned their capital with a series of buildings of a distinct Pathan character unsurpassed in India for magnificence and for individuality of treatment (see *Fergusson's History of Indian Architecture*, chapter IV).

8. *Jaunpur Fort Mosque*.—The mosque in the Fort was erected in A.D. 1398 out of the materials of a Hindu building. In front of the mosque not mentioned by Fergusson is a stone lat or column about 40 feet high, with 3 bands of Arabic inscription half way up. The date of the inscription is A.H. 801. The front row of pillars in the mosques are sculptured, but those in rear are quite plain.

The central archway has an inscription over it, and so has the interior "meh-rab" or niche. The mosque is neglected and in disrepair.

9. *Jaunpur Fort*.—The Fort itself is said to have been built by Firoz Shah. It is now in ruins. The two entrance gates are massive and ornate, and are occupied by police. The first gate has carved spandrels and niches inlaid with colored tiles in yellows and blues. The second gate has some delicate bands of sculpture. Both are in the Jaunpur Pathan style, and worthy of preservation and illustration.

10. *Jama Masjid, Jaunpur*.—The *Jama Masjid* in the city was commenced in A.D. 1419 out of the columns and materials of a Hindu temple, and is a grand building consisting of a pillared courtyard 220 feet by 214 feet. The east end is ruined; repairs are in progress to the north and south gateways. The north gate has been almost entirely renewed, but not well. In front of the mosque itself is a sort of gate pyramid, which appears to have supplied the place of a minaret. The interior of the mosque is whitewashed, but its proportions and enrichments in stone and marble are very remarkable. Flanking the sanctuary of the mosque on each side are two vaulted halls 40 × 50 feet. The building is being repaired by Maulvi Abdul Majid, but the old lines are not followed sufficiently carefully.

11. *Atala Masjid, Jaunpur*.—The *Atala Masjid* is a most beautiful mosque situated in the city. The colonnade of the quadrangle is built up of Hindu columns, whilst the gateways and the facade of the sanctuary to the west, with its three "pyriform" or pyramid gates, are all of very handsome and ornate Saracenic architecture. The interior of the sanctuary has a very richly carved dome, but it is whitewashed and exceedingly dirty. The colonnades are used for all purposes by the natives of the city, and are also very dirty; vegetation requires removing from the roofs. Repairs are executed by the Muhammadans, and are in the charge of Maulvi Abdul Majid; but the work requires to be undertaken with more attention to correctness of detail and with greater vigour.

12. *Lail Darwaza Masjid, Jaunpur.*—The *Lail Darwaza* mosque is two miles outside the city of Jaunpur. It is similar in style to the two mosques above described, but smaller. It is in considerable disrepair, and the quadrangle overgrown with grass. Flanking the central sanctuary on each side are raised galleries enclosed by screen work. These were no doubt constructed for purdah women, but now are used as common habitations. The place should at all events be preserved from dirt and vegetation.

The Jaunpur architecture has been illustrated to a considerable extent by Mr. Heath, Executive Engineer of the Archaeological Division of the North-Western Provinces, and his drawings should be published for the benefit of museums and schools of art throughout India.

Letter from CAPTAIN H. H. COLE, R.E., Curator of Ancient Monuments in India, to the Secretary to the Government, North-Western Provinces and Oudh, Public Works Department, dated Simla, 2nd August 1881.

I have the honour to acknowledge the receipt of your letter No. C-845B-B. of 1881, concerning the Sarnath Tōpe at Benares, and in reply to forward a copy of a Report on Allahabad, Benares and Jaunpur, in which I have expressed the opinion that the loose masonry in the Sarnath Tōpe should be rebuilt. By this I mean that, where the stonework has been displaced or has bulged, it should be taken down and securely replaced, and that where necessary for security plain masonry blocks be inserted to replace what has fallen out and been lost. No new carved work should be done. The upper part of the stone masonry plinth should be laid in cement and secured, as far as possible, against the action of rain; but the mound of brick masonry which surmounts the tope should be simply cleared of creepers and vegetation.

2. I do not think that these measures should cost anything like Rs. 11,000; and if done by daily labour under careful supervision, I am of opinion that a sum of about Rs. 2,000 would go far to rescue the tope in the manner I have suggested. I understand that Mr. Heath has been lately to Sarnath, and I recommend that he be asked to furnish an estimate for the work.

Letter from CAPTAIN H. H. COLE, R.E., Curator of Ancient Monuments in India, to the Secretary to the Government, North-Western Provinces and Oudh, Public Works Department, dated Simla, the 4th August 1881.

I have the honour to report that I visited the Agra Monuments on the 14th April last, in company with Mr. Lawrence, the Collector of Agra, and Mr. Heath, Executive Engineer of the Archaeological Division. I again visited Agra on the 17th and 21st July last, and beg to offer the following suggestions regarding the buildings in Mr. Heath's charge. The repairs and restoration of those in the fort are nearly complete, and I strongly recommend that, when complete, they be handed over to the Collector for custody and keeping in good order. The District officers are, as a rule, more permanently located than military authorities, and are much more likely on that account to take an interest in historical and artistic monuments. As I have already pointed out in Appendix II, paragraph 13, of my report dated 19th May, copy enclosed, there should be no difficulty about this, and I consider the matter of very great importance.

2. In Appendix I of the report, page 3, I have recommended that the Somnath Gates be set up in the Diwan-i-am, where they were formerly when the building was used as an armoury.

The gates should be rendered as secure as possible, cleaned, and enclosed in a glazed case, so as to be preserved from dirt and dust. I would suggest that Mr. Heath be asked to furnish an estimate for this.

3. Iron girders are still visible in the roofs of both the Diwan-i-khas and the Khas Mahal, and are very unsightly objects, clashing with the beautiful marble work and mosaics of the buildings. I recommend that an estimate for restoring the ceilings be prepared.

4. The Jahangiri Mahal, which has been so successfully renovated, is flanked by two pavilions which rise above the roof. One of these has been repaired. The second one is enclosed, and is used as a dwelling by the Provost Sergeant, and it should be cleared and put in repair.

5. The rooms between the Angori Bagh and the Jahangiri Mahal, formerly used as the museum, in the fort, require opening out and leaving as they were originally.

6. I venture to suggest that Mr. Heath may be authorised to photograph all buildings before and after they are repaired, so that there may be a record of the good that is done in each case.

7. As regards Fatehpur-Sikri, I would recommend that the Birbal house, Akbar's office, and Miriam's house be cleared, and that a suitable *dak* bungalow be built. When at Fatehpur-Sikri with Mr. Lawrence and Mr. Heath, the site between the old mint and the Diwan-i-am seemed to us in every way suitable for the purpose, and I suggest that an estimate be framed. At present the use of the three buildings prevents their being seen and the appurtenances inseparable from a *dak* bungalow,—cockhouse, chicks, doors, and windows, &c., do not by any means improve the appearance of the buildings. A really comfortable and commodious *dak* bungalow would probably pay at Fatehpur-Sikri. At present visitors, unless they have an order to occupy the Birbal house, have very limited accommodation in Akbar's office, and many people who would like to stay a few days, drive out from Agra and back the same day.

8. The central archway of the great mosque at Fatehpur-Sikri is most unsightly with whitewash, and I recommend its removal, and that the paintings on the walls be as far as possible restored.

9. Some of the columns and colonnades of the less important buildings at Fatehpur-Sikri have been propped up with masonry buttresses, &c., and when such work has to be done at other places, I suggest that the masonry work be made as little noticeable as possible, and roughly picturesque, rather than "spick and span" with neat dressing and pointing.

10. The grounds round the great mosque have been greatly improved by Mr. Lawrence, who has cleared *débris* away, planted a number of trees, and made a new approach road, which lands the visitor under the Grand Buland Darwaza, the exterior of which many visitors in former days omitted to see. Connected with the keeping of the grounds, the question of systematically keeping down weeds, creepers, and vegetation from the masonry courtyard and buildings was

discussed by Mr. Lawrence, Mr. Heath and myself. We agreed that the best way would be to make a complete clearance after every rains. A mason and mait could do the work in a few days.

11. The buildings at Sikandra are vastly improved by the laying out of the grounds and their conversion by Mr. Lawrence from a wilderness of jungle into a stately park. It would be advisable if something could be done by varnishing to preserve the painted work inside Akbar's Tomb, and details of the varieties of ornament should be drawn and colored.

I also recommend that the finials which originally crowned the kiosques on the entrance gate be renewed.

12. The Taj Gardens are in splendid condition, and show off the marble tomb to full advantage. Mr. Lawrence has removed the museum from the fort to the Taj gateway, and the architectural and historic specimens are better and more often seen. He has also taken over charge of the building from Mr. Heath, and has put on several finishing touches by renovating the marquetry door opening into the tomb, and by removing unsightly doors from various parts of the buildings.

13. The Fatehpur-ki-Masjid near the Taj is in need of repair, and is so much a part of the whole group of buildings, that to withhold the necessary measures would be a mistake, and I therefore suggest that the necessary estimates be called for.

Annual Report by Mr. W. F. HEART, Executive Engineer, of work done during 1881-82 in the Archaeological Division, North-Western Provinces and Oudh.

Taj, Agra.

1. *Repairing east and west walls with Boorji*.—Expenditure Rs. 16,532 during year, total to end of year Rs. 28,603. The work done during the year comprises the partial dismantling of the kiosques at the south-east and south-west corners of the enclosure and rebuilding the same. The south-west kiosque has been completed, the upper story and dome being new work.

2. *Tombs Nos. 2 and 3, Taj Secai*.—Tomb No. 3.—Expenditure for year Rs. 6,398. The fallen verandah (about $\frac{1}{3}$ of whole) has been restored, dome repaired, and all work necessary for the preservation of the tomb has been done. Inlaying and missing marble inside building has not been done.

3. Tomb No. 2.—Expenditure Rs. 2,877. Work done same as in No. 3.
Cleaning and repairing interior of Taj Gateway.—Expenditure for year Rs. 1,970. Work done comprised the cleaning and recoloring of the whole of the interior, putting in a new plinth, and general repairs to stone and plaster work and renewing inlaying.

Fort, Agra.

4. *Repairs to Machi Bhawan*.—Total expenditure Rs. 16,020. Expenditure for year Rs. 1,916. The work done was the restoration of the lower story of the Arcades. All the pillars in this were broken, and the building was supported by bricking up the opens between. The brick work has been removed, and all the damaged pillars cut out and replaced with new ones.

ETMAUDOWLAH'S TOMB, AGRA.

5. *Repairs to river face wall and buildings.*—Total expenditure Rs. 3,847. Expenditure during year Rs. 1,801. The river wall was completed. The pavilion over river, which was used as a visitors' bungalow, was with the consent of the Magistrate opened out, doors and partition walls removed, and the whitewash on the interior removed, so as to expose the fine painted ceiling. The inlaying on front of building completed, that on the ends not being done, as it was not provided for in the estimate.

6. *Repairs to east and west walls and Moek Gate.*—Expenditure Rs. 4,786. Work was only commenced in February, and the larger portion of the expenditure was on the collection of materials.

SIKANDRA.

7. *Repairs to West Moek Gateway, Akbar's Tomb, Sikandra.*—Total expenditure Rs. 9,950. The south-west and north faces have been repaired, and inlaying as far as was proposed done. The south-west corner of the building had to be dismantled, and foundations dug up so as to get out a peepul tree that had penetrated through the building from founds to roof forcing the whole corner out. Work is in progress on the east face.

8. *Repairing platform round Akbar's Tomb.*—Expenditure Rs. 4,532. The stone facing to the raised platform which was much damaged by trees was dismantled and renewed after removal of roots. A width of 15 feet round the edge of platform was taken up and relaid.

9. *Repairs to Khwaja Aitbar Khan's Tomb near Sikandra.*—Expenditure Rs. 2,561. The villagers who inhabited this tomb and had it completely covered in with huts were brought out; the huts, &c., removed. The building cleaned and repairs done so as to preserve the handsome many-domed pavilion on the upper platform.

10. *Repairing East Moek Gate, Akbar's Tomb.*—Expenditure Rs. 991. This gate is so much damaged that to thoroughly repair it, it should be totally dismantled. To prevent as far as possible further decay, a new solid roof has been put on. All trees dug out and all the cracks, &c., well pointed so as to stop damage by water.

FATEHPUR-SIKRI.

11. *Repairs to Hathipahel.*—Expenditure Rs. 5,135, for year Rs. 1,350. This gateway with the Sungeen Boorj attached to it has been thoroughly repaired, all damaged stone work renewed, portion of the arching on interior of domed roof taken down, repaired and reset. Work complete.

12. *Repairs to Mosque and Durgah, Fatehpur-Sikri.*—Total expenditure Rs. 23,328, for year Rs. 9,897. The principal work done during year has been the restoration of the white marble inlaying on the gates, the completion of the roofing, and repairs to red sandstone. The work is nearly complete.

13. *Repairs to Amkhas and 100 feet of Dewan-i-am, Fatehpur-Sikri.*—Expenditure Rs. 8,064. The exterior of the plinth verandah pillars and part of the roof of the Amkhas were in a very shaky state. They have all been dismantled and restored. The 100 feet of Dewan-i-am operated on is 50 feet on either side of Amkhas. This was dismantled and completely restored at a cost of Rs. 27 per foot run.

14. *Repairs to Gates, Agra Road, Fatehpur-Sikri.*—Expenditure Rs. 1,797. The gates on this road were pointed, cleaned, patched with rubble masonry and re-roofed so as to stop decay as far as possible.

TOMB OF FERDÖZ KHAN, NEAR AGRA.

15. Expenditure Rs. 3,620. This handsome building was completely covered with native huts, which were through the agency of the Magistrate removed, and the building has been put into a thorough state of repair. Some of the sandstone carving on this building is the finest about Agra.

TOMB OF SADIQ KHAN AND SALARAT KHAN, NEAR SIKANDRA.

16. Expenditure Rs. 2,975. The Magistrate cleared out the people who used to live in these buildings, and they have been put into a good state of repair so as to arrest decay. Portions of the *baradari* which were dangerous were taken down and rebuilt.

JAUNPUR DISTRICT.

17. *Repairing Afala Masjid, Jaunpur.*—Expenditure Rs. 6,713. The work was confined to two sub-heads "roofing" and "cleaning and pointing." The last included digging out trees from the masonry, and minor repairs to stone work.

HAMIRPUR DISTRICT.

18. *Repairs to Jaini and other Temples, Hamirpur District.*—Total expenditure Rs. 2,325. Expenditure for year Rs. 1,175. The work for the year was on the Kakra Mah at Mahoba, the Rohilla Sigari and Sikora (or Bardi) temples, the buildings abutting on which were cleared away. Trees and jungle removed from the ruins, and any of the fallen structure that could be got into its place was replaced. Much more cannot be done, as the fallen stones have been removed for bridge building and other district works.

PETTY WORKS.

19. Rs. 286 was spent in rebuilding a portion of the enclosure wall at Sikandra gardens.

Rs. 324 was spent on the maintenance of the Anguri Bagh, Agra Fort.

Rs. 490 spent on repairs to masonry in different buildings at Fatehpur-Sikri.

Rs. 474 spent on repairing the Nagina Masjid, Fatehpur-Sikri, and

Rs. 758 on different petty works under Rs. 200 each.

Extract from a letter from the Government, North-Western Provinces and Oudh, Public Works Department, to CAPTAIN H. H. COLE, R.E., Curator of Ancient Monuments in India, dated 23rd June 1862.

Under these circumstances all projects and proposals connected with archaeological questions in the North-Western Provinces and Oudh will in future be submitted to you by the Executive Engineer, Archaeological Division, for your consideration and suggestions before being finally dealt with by this Government in the Public Works Department. This procedure does not contemplate any connection on your part with subsequent execution of the works, which will, as heretofore, be supervised by the Superintending Engineer, 1st Circle, Provincial Works. But this Government would invite your inspection of the works in progress whenever convenient, and the completion report will be sent to you.

**Note on Works executed in the North-Western Provinces, dated
20th September 1882.**

1. The great bulk of the work done at Agra from 1875 to 1879 has been reported on in Appendix H i, page xxiv.

Agra.

2. Since then the finishing touches have been put on to the buildings at the Taj and in the Fort. There is still some work to be done at Fatehpur-Sikri, where I hope a suitable bungalow will be built in order to free the Birbal House, Miriam House and Akbar's Office, which are at present occupied by

Fatehpur-Sikri.

travellers and district officers.

3. At Sikandra the finials to the kiosques on the various structures require to be renewed. A most curious discovery has been made with reference to this building.

Sikandra.

Akbar's tomb rests in an underground vault, a second tombstone is on the uppermost terrace; but Mr. Heath has lately discovered an intermediate chamber, in which there is a third tombstone surrounded with massive square columns. This looks as if the terrace had been raised to better the architectural appearance of the building.

4. The painted interiors at the tombs of Akbar and Etmad-ud-Dowlah sadly require preservation, and experiments are about to be made. Some colored drawings of ceilings in the latter building accompany this report.

5. The Fatehpur-ki-Masjid, which is at Taj Ganj, has been pronounced by Mr. Heath to be beyond repair; but I hope he will exercise his ingenuity and find some reasonable means of keeping it from tumbling to ruin.

6. A reference has been made by the Inspector General of Military Works as to any objection to the demolition of the Damsa-ki-Haveli in the Agra Fort to make room for some quarters, and I have submitted a plan showing the portions of the building that are architecturally interesting and worth preserving. I regret to have to state that up to the present one of two handsome red sandstone pavilions flanking the Jahangir Mahal in the Agra Fort is still enclosed and walled up as a quarter for the Provost Sergeant. Some means will, I hope, be found to find a more suitable residence, and that the building will be cleared and restored.

7. At Jaunpur, the Jama Masjid repairs have reverted to the Mussalman community, and been taken out of Mr. Heath's hands. This will certainly not conduce to good or cheap work.

8. The old Buddhist Tope at Sarnath, near Benares, is still neglected; but I hope that the needful preservative measures will before long be ordered by the Lieutenant-Governor, Sir Alfred Lyall.

9. I would urge the expediency and convenience of affixing to each of the Agra buildings a marble tablet bearing the name and date of each structure, and the date on which repairs were completed.

V

**Note on Monuments in the Central Provinces, dated 21st
September 1882.**

I have unfortunately been hitherto unable to visit any buildings in the Central Provinces, but I ventured to point out to the Chief Commissioner, in a letter dated the 29th July 1881, that I thought the remains of buildings at Baraghat and at Mandhata to be worthy of more than ordinary remedies, and I hope to be able this season to visit and inspect them.

W

Note on the Monuments in Maisur.

I have not been to any place in Maisur as yet, but I learn from Colonel Sankey, R.E., who was at one time in charge of the Public Works Department in Maisur, that in his time repairs were executed to the great temple at Hallabid, to the Baillur temple, and to the small temple of Semanthpur.

2. I hope in course of time to visit these and other monuments of interest in the Maharajah's territories.

X

**Report on Monuments in the territory of H. H. the Nizam of
Haiderabad, together with a Note on Works undertaken.**

Note on Kalburgah, dated 25th June 1881.

My stay in March last at this most interesting place was rendered doubly agreeable through the courtesies of the Nizam's officers, the Sudler Talukdar, and Mr. N. W. Woods, the Executive Engineer of Kalburgah.

2. My first visit was to the "Banda Nawaz," the tomb of a saint who came to Kalburgah in the reign of Firuz Shah, A.D. 1438. It is about 1½ miles east-north-east of the Nizam's bungalow, and is reached by a road passing through a suburb of low houses. On ascending some steps into an enclosure, the tomb appears in front. It is a plain dome about 80 feet high. The inner shrine of the saint is of repoussé silver work, ornamented with circular medallions. Near the saint's tomb is that of his grandson, and south of the enclosure is another, of the saint's eldest son. *All these buildings are of singularly good proportions and worth drawing.*

Worthy of illustration.

Unfortunately each year adds a coat of whitewash to the masonry, and the sculptures are getting more and more obliterated. The endowments come to about Rs. 80,000, and the cost of removing the whitewash could well be afforded by the Trustees.

3. South of the tomb enclosure is a handsome "Nakarkhanah," and in the story below a "caravanserai," with a "Madrassah" and a mosque on the right, all of stone. The serai has a huge archway, and the columns of the buildings are of unusual design. Buildings none worthy of illustration. Illustrations would be valuable.

4. Tombs of the Bahmani Kings.—These are about one-third of a mile south of the "Banda Nawaz." The principal building has two domes, and is now used as a Revenue Court. The doorways have some nice incised plaster arabesque work. The exterior arches of the walls are filled with bold geometric traceries. The interior of the building has some extremely good arched work in plaster, but the dome is black with age, smoke, and bats.

Revenue records in one building.

5. Under one of the two domes is a black tomb-stone. The office records are stored here.

6. Another tomb is in use as a Judicial Court, others are occupied as offices by police, guards, treasury, &c. The building adapted for the latter has some good arch-work in the dome.

7. Vegetation has attacked many of the domes and ought to be destroyed. The buildings are worth preserving and drawing.

Worth drawing.

The buildings are worth preserving and drawing.

8. The Great Mosque.—This remarkable structure dates from the 14th century, and was erected with other buildings at the time that Kalburgah was the capital of the Deccan. It stands in the fort, which is a massive stronghold of that period, and measures about 216 feet east and west, and 176 feet north and south. Its peculiarity is that the whole area is domed over, the light and air being admitted through the ranges of arches to the north, south, and east. The merit of this system is that the mosque is at all times in shade and protected from the sun. Whether the peculiar construction arose out of the form of some previously existing Hindu edifice is a question. Mr. Eastwick calls it "the Temple of Raja Kalchand, which the King Gangu Bahmani converted into a mosque." Be this as it may, the fact remains that, whereas the early Indian mosques were open courtyards surrounded by colonnades, this is a solitary instance of the whole area being under cover, and as such has a special architectural value of its own.

9. The stone columns supporting the domes are very massive. Only one of them has fallen and might worthily be rescued.

Condition.

Four lights have been introduced in each of the small domes. The building was unoccupied during my visit—in 1878 it was used for famine relief purposes—now it is dirty and neglected, a portion of the arches being filled with loose stone. I was informed that it is intended to open out a roadway through the fort communicating direct with the great mosque. This would be a great improvement, and the opportunity might then be taken of repairing and cleaning out the building.

10. On a bastion, 40 feet high, in the fort is a large gun of coiled steel with horizontal bars in the centre. It measures 26 feet long, 7 feet 6 inches round at the breach, and 6 feet at the muzzle. The bore is 11 inches in diameter. The gun should be preserved *in situ*.

* This seems doubtful, as the architecture is purely Moslem.

11. **The Jama Masjid.**—Near the Shah Bazar is a vast building—the Jama Masjid—with square columns, pointed arches and small domes, surrounded by a quadrangle. The Nizam's Government have repaired it.

Letter from CAPTAIN H. H. COLE, R.E., Curator of Ancient Monuments in India, to the Resident, Hyderabad, dated Simla, 11th September 1882.

I have the honour to acknowledge the receipt of your No. 135-1882-83, forwarding a communication from His Highness the Nizam's Minister, dated 30th March 1882, on the subject of repairs to the ancient buildings at Kalbargah.

2. Referring to the Roza of Khwaja Banda Nawaz, the proposal to remove the several coats of annual whitewashing accumulated on the walls is in every way desirable; but I strongly deprecate the subsequent whitewashing of the walls and picking out the ornamental sculpture in black. All masonry work should, I submit, be left plain without any coats of whitewash or colour. This remark applies also to the tombs of the Bahmani Kings, the *stone masonry* of which should, I think, be left clean and uncovered by any additional coatings.

3. In regard to the large masonry mosque in the Fort, the rebuilding the fallen column is a very proper step towards maintaining this interesting edifice; but I would mention that any substantial or solid closing in of the various sections of the building would detract from its handsome appearance. That portion of the edifice which is not sacred for praying purposes could be screened off for use as schools, &c., and the accompanying lithograph of a mosque at Cairo furnishes a suggestion for an enclosure, according to the precedents of Moslem architecture. Hoping to hear further of the steps taken at Kalbargah for the maintenance of these valuable monuments, &c.

Note on Works undertaken, dated 21st September 1881.

The foregoing explains what has been recommended and contemplated for Kalbargah. I hope to inspect the works during progress.

2. In December 1881 His Highness the Nizam issued orders to provide doorways to certain of the caves at Ajunta, and I understand that this reasonable remedy has been of considerable benefit to the caves and the paintings which cover their ceilings and walls.

3. I was accordingly authorised in July last to express the satisfaction of the Governor General in Council for communication by the Resident at Hyderabad to the Government of His Highness for the preservation of these most interesting monuments.

Y.

List of some ancient and modern Forts and Citadels in India.

(Under correction.)

Punjab.

Punjab.

- 1 ATTOCK—Muhammadan. Akbar, 1583.
- 2 BALLABGARH—Delhi—Muhammadan.
- 3 CHAASRUDDAH—Peshawar—Old Pathan Fort called Bala Hissar, built on the site of Pushkalavati, the ancient capital of Gandhara.
- 4 DELHI (OLD FORT)—Lalkot, 1052—Hindu.
- 5 Kila Rai Pithora, 1180 A.D.—Hindu.
- 6 Sibi or Kila-Ahli, 1304—Muhammadan.
- 7 Tughlakabad, 1321—Muhammadan.
- 8 Adilabad—Muhammadan, 1325.
- 9 DELHI (MODERN)—Muhammadan.
- 10 DEWALPUR—Montgomery—Early Muhammadan; in ruins.
- 11 EDWARDENABAD—Bahru—Modern, 1848.
- 12 ISLAMGARH—Bahawalpur State—Hindu.
- 13 JAHANABAD—Rohtak—Built by George Thomas.
- 14 JAITSAR—Sirhind State—Hindu.
- 15 JAMRUD—Peshwar—Muhammadan. Occupied by the British.
- 16 KOT KANGRA—Early Hindu.
- 17 KULAGARH—Mandi State—Hindu. 1,500 feet above the Beas river.
- 18 MALAUN—Hindu State—Gurkha. 2,000 feet above the rivers Gaurra and Gambhar.
- 19 MALLOT—Salt Range—Old Hindu. Contains a temple on the Kashmir style of architecture. Circuit of fort 8,000 feet.
- 20 MASTGARH—Bashahr State—Gurkha.
- 21 MICHNI—Peshawar—British.
- 22 MOHUR—Bashahr State—Gurkha. Contains a famous Hindu Temple.
- 23 MULTAN—Muhammadan.
- 24 NAWAGARH—Bashahr State—Gurkha.
- 25 PATHANKOT—Gundaspur—A very ancient Fort. Hindi coins of the 1st Century found in it.
- 26 PESHAWAR—Fort or Bala Hissar of sun-dried brick—Muhammadan.
- 27 PHILLOUR—A Fort built by Ranjit Singh.
- 28 RANGURH—Hindu—Gurkha.
- 29 RANIGAT—Eusefai, Peshawar—Early Buddhist, with Greco-Bactrian buildings. Strong hill fort.

- 30 ROTAS—Jhelum—Massive fort built by Shih Shah; covers 200 acres Punjab.—Muhammadan.
- 31 SHARKADAN—Peshawar—Sikh. Now held by the British.
- 32 SHEH SHAH—Multan—River Fort on the Chenab—Muhammadan.
- 33 SHORKOT—North-west of Multan—A very ancient Fort. Greek coins found; also a quantity of moulded bricks.
- 34 TANK—Dera Ismail Khan—Fort of mud. Sir H. Durand lost his life here.

North-Western Provinces and Oudh.

- 35 AGRA—Muhammadan. Built by Akbar.
- 36 AJAIGARH—Bundelkhand—Hindu, 9th Century.
- 37 ALIGARH—Originally Hindu—Enlarged by the Mahrattas.
- 38 ALLAHABAD—Muhammadan—Akbar, 1575.
- 39 BARANA—65 miles west-south-west of Agra—Old Hindu Fort. Added to by Muhammadans and Jats.
- 40 BATESWAR—48 miles south-east of Agra—Hindu Fort.
- 41 BHIND—Near Etawah—Hindu Fort.
- 42 BHAJGARH—Mirzapur—Hindu; ruined.
- 43 CHAKHERI—Near Mahoba, Banda—Muhammadan.
- 44 CHUNAR—Mirzapur—Hindu; used.
- 45 HATHRAS—Aligarh—Hindu; ruined.
- 46 KALINGAR—Banda—Hindu, 7th Century. Fortifications dismantled 1806. The site is covered with interesting remains.
- 47 JAGNER—Agra—36 miles south-west of Agra, on a hill 400 feet high, covered with remains of temples, &c. Has a gateway dated 1571, but the fort is ancient Hindu.
- 48 JALAOH—Small Hindu Fort. Remains of fine buildings visible.
- 49 NALAPANI—Dehra Dun—Gurkha, 1814.
- 50 NINISAR—Lucknow—Muhammadan, 1362. Built on a Hindu foundation.
- 51 RAGULI—Banda—Hill Fort and 1,300 feet above sea—Hindu.
- 52 RAI BARELI—Muhammadan, 15th Century. Has some handsome tombs and mosques.
- 53 RAJGHAT—Benares—Erected by the British, 1857.
- 54 RAMNAGAR—Rehilkhand—Old Hindu Fort, with 54 bastions.
- 55 SHAHZAHANPUR—Muhammadan.
- 56 SIRAKAT—Kumaun—Hindu. Strong, but without water-supply.

Bengal and Assam.

- 57 BARABATI—Cuttack—Hindu, 14th Century; almost ruined.
- 58 BENUGARH—Purneah District—Hindu, B.C. 57; ruined.

- Bengal. 59 BESKUH—Patna—Buddhist. Large deserted Fort.
 60 BIHAR—Gya—Buddhist. Massive walls.
 61 CALCUTTA—(Fort William)—British.
 62 DERDURIA—Bacca District—Hindu; 2 miles in circuit; contains remains of buildings.
 63 GHOLDAHAY—Remains of a Portuguese Fort, which grew into Hugli.
 64 MONGHYE—Muhammadian.
 65 RAJAGRIAH—Patna—Ancient Buddhist; in ruins.
 66 RONTAGARH—Shahabad—Ancient Hindu; 1,400 feet high, 28 miles in circuit; contains many interesting buildings.
- Assam. 67 GARHGAON—Silimgar, Assam—Hindu.

Rajputana.

- Rajputana. 68 AMER—Jaipur—Hindu.
 69 BHAINSROR—Udaipur, on a rock—Hindu.
 70 BHARTPUR—Hindu, 1733.
 71 BHATNAID—Bikaner—Old Hindu.
 72 BIKANER—Hindu, $8\frac{1}{2}$ miles circuit. Good condition and massive.
 73 CHITTORE—Early Rajput.
 74 DIG—Deeg—Bhartpur—Hindu.
 75 JAIPUR—Tiger Fort—Hindu.
 76 JAISALMER—Hindu; 250 feet high; strong.
 77 JODHPUR—Hindu, 1549.
 78 RAJGAH—Ulwar State.
 79 RANTAMBORE—Jaipur State.
 80 TARAGARH—Ajmir—Originally Hindu.

Central India.

- Central India. 81 BHILAI—Bhopal—Hindu.
 82 CHANDERI—Gwalior—Ruins; Hindu.
 83 GWALIOR—Gwalior—Hindu.
 84 JHANSI—Gwalior—Hindu; naturally strong position.
 85 JAHAR—Gwalior State.
 86 RAISEN—Bhopal—Hindu.
 87 SENDWA—Maharatta, one mile in circuit.

Central Provinces.

- Central Provinces. 88 ASIRGARH—Nimar—Hindu; strong.
 89 BALLAPUR—Chanda—Hindu.
 90 CHAMAGARH—Narsingpur District—Hindu; ruined.

- 91 DEORI—Saugor—covering 3 acres—Hindu—1713; 1,700 feet high; Central Prov-
occupied by Police, &c. VIDOHA.
- 92 DHAMONI—Saugor—Hindu, 1600; 52 acres.
- 93 DONGARGAHI—Ripur—Hindu; 4 miles circuit; no remains of
buildings.
- 94 GARHAKOTA—Sagar—Hindu, 1629.
- 95 LAYHAGARI—Bilaspur District—Hindu; part of the Fort remains in
good preservation.
- 96 RAHARGARI—Sagar—Hindu; large Fort with many buildings.
- 97 RAIPUR—Hindu, 1400; a mile in circuit.
- 98 SAGAR—Mahratta Fort—covering 6 acres.
- 99 SINGAUBHARI—Jubbulpore, on a high hill—Hindu, 1540; remains
of the Fort are extensive.
- 100 TEPAGARI—Chanda—Hindu; 2,000 feet above the sea.
- 101 UMER—Nagpur—Hindu; partly ruined.

Bombay Presidency.

- 102 AHMADNAGAR—Deccan—Muhammadian, 1559; 1½ miles in circuit. Bombay.
- 103 BIDAPUR—Kaladgi—Muhammadian.
- 104 BUKKUR—Sind—Muhammadian.
- 105 CHAMPANER—Panch Mahals—Large and strong; Hindu.
- 106 DAMAN—Portuguese Settlement—In Guzerat, two Forts: "Damas
Grande," "Damas Piquent."
- 107 DHARWAR—Hindu, 1403; falling into ruins.
- 108 DHULLA—Khandesh—Hindu.
- 109 DIU—Portuguese, 1545; in good preservation.
- 110 DUNAD—Panch Mahals—Muhammadian, 15th Century; strongly
built.
- 111 HARTIHANDHAGARI—Ahmednagar; 3,869 feet above the sea.
- 112 IMARGARI—Khairpur State, Sind. Blown up by Sir C. Napier.
- 113 JENNER—Poona—Muhammadian, 1450.
- 114 PURUNDHAR—Poona, on a hill, 4,472 feet above sea—Hindu; after-
wards occupied by Mahrattas.
- 115 RAIGARI—Thana—Hindu; eventually taken by Mahrattas.
- 116 RAIRI—Ratnagiri—Mahratta, 1662.
- 117 PAROLA—Khandesh—Hindu.
- 118 PANTARGARI—Satara—Mahratta.
- 119 PAWARGARI—Panch Mahals, on a hill, 2,800 feet above the sea—
Jain; afterwards occupied by Muhammadians, who erected
buildings.
- 120 PAWARGARI—Kolhapur—Hill Fort—Hindu.
- 121 SATARA—On a hill—Mahratta.

- Bombay. 122 **SERWAN**—Karachi—Sind, old fort, said to be of Alexander the Great.
 123 **SHIVNER**—Poona—Maharatta.
 124 **SHOLAPUR**—Muhammadan, 1845.
 125 **SONGARR**—Baroda—Hindu.
 126 **SURAT**—Built 1373, rebuilt 1546.
 127 **SINGGAR**—Poona—Hindu.

Berars.

- Berars. 128 **BALAPUR**—Muhammadan, 1757; large and strong.
 129 **GAWILGARH**—Ellichpur—Muhammadan, 1420. Fort dismantled 1853.
 130 **NARMALA**—Ellichpur, on a hill, 3,151 feet above sea; extensive fortification—Jain; afterwards added to by Muhammadans; interesting ruined buildings in the Central Fort.

Haiderabad.

- Haiderabad. 131 **GOLCONDA**—Fort used as the Nizam's Treasury.
 132 **DAULATABAD**—On a rock—Hindu (Deogiri); large Fortress.
 133 **NALDRUG**— $1\frac{1}{2}$ miles in circuit, on a rock 200 feet high—Early Hindu.

Malsur.

- Malsur. 134 **BANGALORE**—Hindu, 1537.
 135 **BANTHAL**—Chitaldrug—Hindu, 16th Century.
 136 **CHIKBALLAPUR**—Kolar—Hindu, 1479.
 137 **CHITALDRUG**—Nagur—Hindu, 1508.
 138 **DODDALAPUR**—Bangalore—Hindu, 14th Century. In the Fort are the remains of several fine buildings and tanks.
 139 **MADRUR**—Hindu.
 140 **NANDIMRUG**—Kolar, on a hill, 4,810 feet above the sea—Hindu; added to by Muhammadans.
 141 **SAYARDEVR**—Bangalore—Hindu.
 142 **SERINDAFATAN**—Hindu, 1454; existing fortification constructed by Tipu Sultan.
 143 **SIRA**—Tumkur—Muhammadan.

Madras.

- Madras. 144 **ARCOT**—Hindu—Now almost ruined.
 145 **ARIA KUSSUM**—Near Pondicherry—Hindu.
 146 **ARNI**—North Arcot—Hindu; in ruins.
 147 **AYUR**—Salim.
 148 **AMBERURUR**—North Arcot, Madras.

Madras.

- 149 BELLARY—Hindu, 15th Century; strong.
- 150 BOBBILI—Vizagapatnam—Hindu.
- 151 CANNANORE—Malabar—Hindu.
- 152 CHAITPET—South Arcot District—Hindu.
- 153 CHANDRAGIRI—North Arcot—Hindu, 1510.
- 154 CHINGLEPUT—Hindu, 16th Century.
- 155 CHETTYAL—Malabar—Dutch, 1717.
- 156 COCHIN—Malabar—First European Fort in India, Portuguese, 1503; now ruined and occupied by a light-house.
- 157 COVELONG—Chingleput—Muhammadian, 1745; blown up in 1752 by Clive.
- 158 CUDDALORE—South Arcot—Muhammadian; in ruins.
- 159 FORT ST. DAVID—South Arcot, 17th Century. Parts in good preservation; is a landmark for mariners.
- 160 DEVIKOTTA—Tanjore on the coast at the mouth of the Coleroon River. An early settlement of the Company; ruined.
- 161 DHANAPURAM—Coimbatore. Fort dismantled in 1792.
- 162 DINDIGAT—Madura, on a rock, 1,223 feet high—Hindu. Was occupied by the British until 1800; great natural strength.
- 163 GANCHIKOR—Cuddalore District, 1,070 feet high—Hindu, 1589.
- 164 GANJAM—Company's Fort, 1708.
- 165 GOOTY—Bellary—Mahratta, 16th Century.
- 166 GUERAN KONDA—Cuddalore—Hindu.
- 167 GINGI—South Arcot—Hindu, 1442. Several fine buildings in the Fort.
- 168 KANYAKURUM—Nellore—Hindu, 13th Century; on a hill 1,500 above the sea. There is an ancient temple here.
- 169 KARANGULI—Chingleput.
- 170 FORT ST. GEORGE—British, 1609.
- 171 PALOHAT—Malabar—Hindu.
- 172 PENNAKONDA—Bellary—Hindu; afterwards occupied by Muham-madans, who left many buildings.
- 173 PERAMAKAL—South Arcot—Hindu; on a hill 370 feet high.
- 174 RAJHENDU—Bellary—Hindu.
- 175 TANJORE—Hindu—Occupied by Mahrattas.
- 176 SANKARIDURU—Salem—Hindu; very strong.
- 177 SATYAMANJALAM—Coimbatore—Hindu.
- 178 TELICHERRY—Malabar—Hindu; used as a jail.
- 179 TIASAR—South Arcot—Old Hindu.
- 180 TRANQUERBAR—Tanjore—Built by the Danes, 1624.
- 181 TRIVANDRUM—Travancore—Hindu; full of quaint wooden build-ings.
- 182 VELLORE—North Arcot—Hindu, 1,500 strong. Has a beautiful temple inside.
- 183 VINUKUNDA—Kistna—Old Hindu.

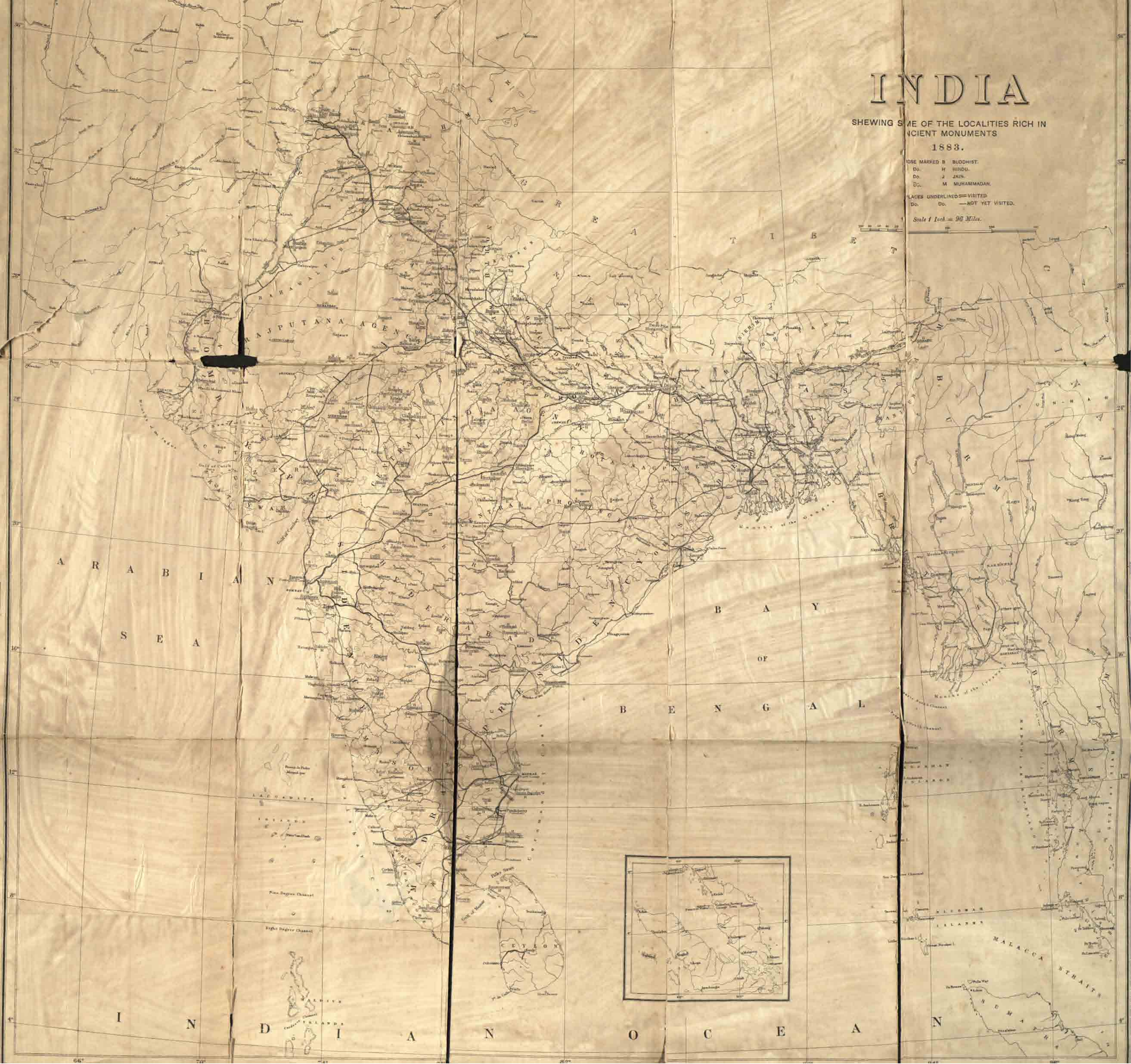
INDIA

SHEWING SOME OF THE LOCALITIES RICH IN
ANCIENT MONUMENTS
1883.

POSE MARKED B BUDDHIST.
Do. H HINDU.
Do. J JAIN.
Do. M MUHAMMADAN.

PLACES UNDERLINED = VISITED.
Do. Do. — NOT YET VISITED.

Scale 1 Inch = 90 Miles.



12°

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66°

70°

PRESERVATION OF NATIONAL MONUMENTS.

SECOND REPORT

OF THE

CURATOR OF ANCIENT MONUMENTS

IN

INDIA,

FOR

THE YEAR 1882-83.



CALCUTTA:

PRINTED BY THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA.

1883.



PRESERVATION OF NATIONAL MONUMENTS.

SECOND REPORT

OF THE

CURATOR OF ANCIENT MONUMENTS IN INDIA

FOR THE YEAR 1882-83.



1. Soon after my return to head-quarters from tour early in April 1882, examinations for promotion prevented my getting fairly to work until the 7th June.

Return to head-quarters, April 1882.

2. The party of draftsmen who had proceeded to Madras on the 12th December 1882, remained in that presidency up to the end of July. Very complete surveys were made of the Srirangam and Jambuishuar temples at Trichinopoly of the great temple at Madura, and of the temple at Ramesseram in Pantiben. These are remarkable examples of Dravidian architecture, but being in the possession of natives, the only hope of influencing the trustees charged with administering the temple endowments is by detailed specifications of the requisite repairs, illustrated by plans and drawings.

Surveys in Madras.

3. In July and August 1882, I visited Delhi, Udaipur, Nagda, Eklungji, Chittore, Indore, Ajmir, Mount Abu, Jaipur, and returned to Simla on the 22nd of August.

Tour during the rains of 1882-83.

4. Until November my office continued to be engaged in fairing out field surveys, and the following drawings have been prepared since April 1882:—

Preparation of plans and drawings.

Presidency or Province.	Name of place.	General building.	No. of drawings.		Remarks.
			Plans, perspective, and sections.	Details.	
PUNJAB	Lahore	Wazir Khan's mosque	1	28	These plans have been prepared from rough measurements. The details consist of following tracings from the original tracings and tiled patterns on the walls: 26 have been colored and finished, and 28 are in progress.
	—	Plan of fort	1	—	

Presidency or Province.	Name of place.	General building.	No. of sheets.		Remarks.
			Plans, sections and elevations.	Details.	
PUNJAB—continued.	Amritsar.	Golden temple . . .	3	2	Fairly cut from rough field measurements, and into set of tracings on cloth.
	Delhi	Fort, Diwan-i-am	2	One large tracing on cloth taken from the mosque in its present state, and one small restored drawing made of the same.
	Nur Mahal	Gateway of aeral . . .	1	...	A sheet of drawings showing the original condition.
CENTRAL INDIA.	Etmadai	Explorations in Etmadai . . .	0	17	
	Gwalior	Fort, Palace . . .	2	21	The details are still in progress.
MADRAS	Trichinopoly.	Temples of Srirangam . . .	2	7	Drawings illustrating disrepair notes and recommendations for remedies.
	Jambunihar	Tomb of Nathar Aulia . . .	2	3	
	Madura	Great temple . . .	5	12	
	Rameswaram	Temple of Siva . . .	2	0	
RAJPUTANA.	Ajmer	Gateway of the fort of Taragarh . . .	2	...	Restored drawings.
	Jaolai Bagh.	Marble pavilion . . .	4	...	
		Dargah of Kwaja Syad Achi-din-ka-jhompra (ancient mosque) . . .	2	1	
			1	...	
CENTRAL PROVINCES.	Chittore.	Tower of victory . . .	2	2	Drawings in progress showing disrepair.
		Sansa Chitri . . .	1	1	
		Jala Tower . . .	2	1	
	Mandla.	General plan . . .	1	...	
		Temple of Suddheswar . . .	1	1	
		" of Omkar . . .	2	1	
		" of Gauri Sannath . . .	2	...	
PUNJAB	Delhi	Fort, Diwan-i-am mosque	2	Completed and sent to Paris for reproduction.
	Lahore	Plan of fort . . .	1	...	
MADRAS	Trichinopoly	Temple of Srirangam . . .	2	7	
		" of Jambunihar . . .	2	3	

Besides these I have furnished, at the request of Colonel Gordon Young, the Commissioner, a design for adding shops round the enclosure of the Fatehpuri Masjid at Delhi; by this means the mosque revenues are capable of increase and of contributing to the means for properly maintaining the

building, which was bought by Government from a Hindu and given back to the Muhammadans of the city at the time of the Delhi Assemblage. I also, at the request of the Military Works Department, prepared a design for a balcony in front of officers' quarters in the upper part of the Lahore gate of the Delhi fort, in harmony with the architectural style of the surroundings. Lieutenant-Colonel Steel asked me to supply a design for a telegraph office at Ajmir to harmonise with the native buildings of the city, and I gave a plan which is approved. I have also assisted Major Bisset, R.E., Manager of the Rajputana State Railway, with architectural suggestions for the Central Railway Offices at Ajmir.

Lahore gate,
Delhi fort.

Ajmir Tele-
graph Office.

Ajmir Rail-
way Offices.

5. The following is a detail of my tour from November 1882 to April 1883. On the 7th November I left Simla, visited Ajmir on the 9th and inspected the pavilion in the Daolat Bagh with Mr. Brassington, Executive Engineer in charge of the repairs, for which a sum of Rs. 2,000 had been allotted from the Government of India grant. On the 11th November I made a hurried survey of the old Portuguese ruins in the Bassein Fort near Bombay. I reached Madras on the 14th and arrived at Masulipatam on the 19th of the month. I then proceeded to Amravati on the Kistna river and carefully investigated the condition of the great Buddhist Tope. My report, dated 25th November, has been submitted to the Madras Government, also to the Government of India, *vide* my letter No. 620 of the 27th February 1883. I returned to Madras on the 30th November and had an interview with His Excellency the Governor on the subject of conserving the Amravati marbles *in situ*. I also succeeded in arranging with the Madras Government for the special employment of Mr. Black, Assistant Engineer. I returned to Bombay on the 5th of December and conferred with the Bombay Government on the subject of repairs to monuments at Ahmedabad and Bijapur. Leaving Bombay on the 7th December, I proceeded to Sanchi in Bhopal and started Major Keith on repairs to the great Buddhist Tope at that place. I left Sanchi on the 12th December and went to Mandhatta on the Narbadda, where there are many remarkable Hindu monuments well worthy of record and preservation. Allahabad was next visited on the 18th December in order to submit some recommendation to His Honour the Lieutenant-Governor for work in the Archaeological Division, North-Western Provinces. I then returned to Simla and started off a party of draftsmen to the Central Provinces and Rajputana. On the 6th January 1883, I left Simla for

Tour,
November to
April 1882-83.
Ajmir.

Bassein.

Amravati.

Appointment
of Mr. Black.

Bijapur and
Ahmedabad.

Sanchi.

Mandhatta.

Peshawar. Peshawar and arranged with the Commissioner for some excavations in the Eusofzai district. I next visited Lahore and up to the 26th was engaged with Lieutenant Abbott, R.E., in going over the various buildings of interest at Lahore. From the 27th to the 29th we were engaged at Delhi, and up to the 31st at and near Jullunder. I visited Jaipur on the 14th-15th February, and saw the Resident about repairs to the Amber Palace. Reaching Agra on the 16th, I inspected the buildings in the charge of Mr. Heath, Executive Engineer of the Archaeological Division, North-Western Provinces, and went with him to Fatehpur-Sikri, to Sikandra, to Muttra, to Bindrabun, to Aligarh, to Budaon, and to Jaunpur. The latter place I left on the 5th March and proceeded to Sasaram in Bengal in order to examine the work at Shir Shah's tomb progressing under Mr. Beglar, Executive Engineer of the Ancient Monuments Division. Leaving Sasaram on the 8th March, I revisited Sanchi in Bhopal on the 12th to 14th in order to inspect the progress of Major Keith's operations at the Great Tope. I next proceeded to Bijapur in Bombay to see some repairs to the architectural buildings of that place under the Executive Engineer, Mr. Reinold. Leaving Bijapur on the 20th, I revisited Hoti Mardan, where I arrived on the 28th. After inspecting the excavations at Sanghao, I made a list of the numerous sculptures that had been unearthed and collected. Leaving Hoti Mardan on the 5th April, I reached Lahore the following day, and had an interview with His Honour the Lieutenant-Governor on the 7th, in order to report to him what had been done, and to ascertain his views in regard to this year's work at Lahore and Delhi. I returned to head-quarters on the 8th April 1883. The details of the year's work are specified in the Appendices.

Return to head-quarters.
List of monuments.

6. Appendix A, gives a revised and augmented list of the most important known monuments in the various administrative areas. Out of the 50 buildings in the Bengal list, I have visited 2. Of 107 monuments in the Punjab list, I have examined 31. Of the 15 in Kashmir, I visited 10 in 1868. Of the 37 in the Rajputana list, I have seen 16. Central India shows a list of 26 monuments, of which I have seen 8. Haiderabad has 14 entries, one of which I know. Of Maisur with its 8 entries, Burma with its 7 entries, Nepal with 3, Assam with 4, I know nothing whatever. Out of the 20 buildings in the Madras list I have been to 12. Of the 42 in the Bombay list I have seen 17. This makes in all 428 entries, of which I have personal knowledge of 121.

7. Of the 428 monuments enumerated in these imperfect schedules, 127 are in Native States or in charge of natives, and repairs would have to be executed at the expense of the local Chiefs or endowments. The remainder, 301, can only be repaired at the charge of Government or with the assistance of grants-in-aid. Cost of repairs how met.

8. The survey and examination of buildings in Rajputana will take several years to complete.

9. Up to date, 768 rough field plans and drawings have been made by my establishment; 437 of these have been fained out, producing 149 finished sheets; and 127 out of these 437 are in course of reproduction, producing 40 plates for publication. It is desirable to publish these and make use of all available material. Plans and drawings.

10. Appendix B, gives a provisional list of British monuments worthy of preservation on account of their public interest. British monuments.

11. Appendix C, is a list (under revision) of works bearing on Indian and Oriental architecture, archaeology, and art. Works of reference.

12. Appendix D, details the progress of work in the Madras Presidency, to which an important impulse has been given by the cultivated taste of the Governor, Mr. Grant Duff, as well as by the tour which took him in July 1882 to many places of interest. My inspection of the Buddhist Tope at Anravati in November 1882 resulted in the report quoted at length in paragraph 6. The temporary appointment of Mr. H. Black in December 1882 as Assistant Engineer for Monumental Preservation provided the means of suitably applying the grant of Rs. 5,000 contributed in 1882-83 out of imperial funds to some preliminary operations at Bijanagar, which are described at page lxxxvi. Up to the end of March, Mr. Black had succeeded in clearing away jungle and overgrowth from 110 buildings, in examining the great Vittala Swami temples, also in the removal of debris, and modern additions, previous to framing an estimate for structural repairs. Madras.

I have since seen, commented on, and recommended Mr. Black's estimates for Bijanagar and the Seven Pagodas, and a contribution of Rs. 10,000 has been made out of the funds provided by the Supreme Government during the year 1883-84.

Mr. Black has recently been at the Seven Pagodas, where, as suggested by me, he cleared away the sand from the ancient Shore or Alaiva temple, and (as I expected) revealed the walls of a courtyard to the east, thus bringing to light a most interesting adjunct to the building, which appears to be unique in its architectural treatment.

Bombay.

13. Appendix E, details the various steps taken in the Bombay Presidency. Early last year I invited the consideration of the Bombay Government to the question of how far monuments of interest and beauty should be converted for use as offices, dwellings, stores, or other purposes of Government. There can be no possible harm in using dismantled shells of buildings such as exist in the citadel at Bijapur, neither is there any objection to putting native structures of interest to the same uses as those for which they were originally erected, but *it is incongruous* to continue the use of the beautiful mosque of Sidi Syad in the Bhaddar at Ahmedabad as a district court-house for the mamlatdar; whilst the recent conversion of the handsome mosque of Mahmud's tomb at Bijapur into a travellers' rest-house discourages national appreciation of ancient examples of native architecture.

This question is so important that I strongly commend to Government the advisability of laying down some general principles.

I have been in frequent correspondence with the Bombay Government on the subject of appointing a special officer to execute repairs to ancient monuments. The Executive Engineer of Ahmedabad, in submitting various estimates for repairs in December 1882, observes that "the estimates have been framed as well as they could be, but they cannot be considered satisfactory, as this Department is not trained to this kind of work." In regard to certain estimates for Bijapur, the Superintending Engineer writes in October 1882 that "it is very doubtful, even if funds should be available, whether the Executive Engineer will be able profitably to undertake any more work than he has now in hand." The Collector of Ahmedabad in May 1883 supported my recommendation for a special officer to have charge of repairs, and my proposal for the provisional appointment of a young Assistant Engineer to prepare projects in consultation with me has been submitted to the Bombay Government.

As regards localities other than Ahmedabad and Bijapur, sundry beneficial remedies have been applied to the Karli caves, where the natives had made an objectionably free use of paint for religious festivals; to the deserted temple at Ambernath, the repairs to which I have not yet seen; and an estimate is under preparation for carrying out the recommendations submitted for the buildings in the old Portuguese fort of Bassein.

Bengal.

14. Appendix F, refers to works in progress in Bengal. Mr. Beglar, formerly one of Major-General Cunningham's

Assistants in the Archaeological Survey, has since 1880 been engaged as Executive Engineer in repairing the great Buddhist temple at Buddha Gaya. I have not been concerned in this work, which was initiated (before the creation of my office) in consultation with General Cunningham. I have, however, submitted some recommendations for disposing of the numerous fragments of sculpture which abound at the temple, also for providing permanent custody. Mr. Beglar early in 1882 became engaged in repairs to Shir Shah's tomb at Sasaram in the Shahabad district. I had no opportunity of perusing the specification until the work had been begun, and repairs of questionable taste had been completed when I first saw the building early in March last. I have since submitted recommendations and have generally advised the Bengal Government to take in hand the best monuments of their class in the province, and, as usual in similar cases, to direct the Executive Engineer to prepare his projects in consultation with me. A rough estimate for dealing with Man Singh's palace buildings at Rohtas had been prepared by Mr. Beglar, but I have pointed out that the old ruins at Gaur are generally held to be of greater importance, and should be given precedence over others. General Cunningham agrees with me in this opinion.

15. Appendix G, deals with the work in Central India. Central India. Major Keith was appointed Assistant to me on the 14th October 1882. He had been previously engaged under the Agent to the Governor General at Fortress Gwalior, where some important buildings have been repaired at my recommendation. His work at Sanchi is of still greater importance. The Buddhist remains are the most imposing of their class in India and the most complete. The operations described commenced in December 1882 under my orders; structural repairs to the Great Tope and its elaborate gateways, two of which were in fragments on the ground, being accomplished by the middle of April 1883. Much remains to be done to the various structures, about which General Cunningham and Mr. Fergusson have written at greater length than about any other group of Indian monuments.*

Casts of the eastern gateway made by me in 1869 are at the Kensington Museum in Edinburgh, and in Paris. Sir Lepel Griffin has informed Government that Her Highness the Begum of Bhopal proposes to build a travellers' bungalow

* See Cunningham's "Bhilai Tope," and Fergusson's "History of Indian Architecture" and "Tree and Serpent Worship."

close to the Sanchi monument, and the Bhopal State Railway will have a station at the village.

The Central India Agency embraces a large area of great archaeological and architectural interest. Besides Gwalior and Sanchi, to which special attention is being directed, there are the important centres of Khajuraho, Oorcha, Duttiah, Mandu, and Bhilsa, all of which should be surveyed and cared for.

Sir Lepel Griffin reported to the Supreme Government in March last that all of the Native Chiefs "will in different degrees consent to contribute to such schemes as the representatives of the British Government may specially press upon their notice. . . . Where a particular work is to be undertaken, the Political Agent will from time to time endeavour, with as little friction as possible, to obtain help both in labor, material, and funds from the Native Chiefs concerned."

Rajputana.

16. Appendix H, deals with Rajputana, a country which above all others in India possesses most interesting historical and artistic traditions. They fired the enthusiasm of Colonel Tod, who in his "Rajasthan" records experience and investigations extending over several years of official connection with the States of Rajputana. Most of the numerous Native Chiefs take a pride in the monuments of their ancestors, and are more easily induced to bestow care upon them than any other class of Native Princes in India. The Governor General in Council has recently determined to induce the Durbars through the British Political Officers to make a real effort to carry out the repairs and remedies recommended by me, and I am confident that a careful survey, calling attention to the necessities in each structure, will in time be productive of the best results.

Repairs have commenced to an interesting marble pavilion of Jahangir's time in the Daolat Bagh at Ajmir, and some further repairs have been applied to the ancient mosque of that city known as the Arhai-din-ka-Jhompra. Surveys have been made of the group of Muhammadan buildings in Ajmir called Khoja Syad, and of the Jain Tower, Khumbo Rana Tower, and Sanga Chauri at Chittore in Meywar. Permission has been obtained to survey the ancient palace at Amber near Jaipur, and the Jain temples at Abu.

Punjab.

17. Appendix I, relates to operations in the Punjab. A number of works, projected on recommendations submitted in a report on Lahore and Delhi (see Annual Report, 1881-82, Appendix H, pages xxi-xxix), had been estimated for by the local Executive Engineer early in 1882, and the visit of Sir Robert Egerton to Nur Mahal near Jullunder initiated

repairs to the gateway of the serai at that place, for which I furnished a restored drawing. Besides these, repairs to a number of minor buildings around Lahore were provided for in an estimate framed by the Executive Engineer at Lahore. It soon became evident to me from the specifications which I had an opportunity of perusing that no satisfactory results could be obtained unless a special officer had charge of the works; I accordingly recommended Sir C. Aitchison to apply for the services of Mr. Heath, Executive Engineer, Archaeological Division, North-Western Provinces. It seemed to me that this officer, with suitable sub-divisional establishments, could simultaneously superintend work in the Punjab and North-Western Provinces. Objections were, however, raised to this arrangement, and Sir C. Aitchison determined to appoint Lieutenant Abbott, R.E., to the charge of an archaeological sub-division, and directed him to arrange plans for repairs, and to prepare the estimates in communication with me, and under my approval. This appointment took place on the 3rd November 1883, since which date Lieutenant Abbott has been engaged at Lahore and Delhi in the initiation of the various repairs, specified in the Appendix, to the following buildings:—

Jahangir's tomb.	}	Lahore.
Asaf Khan's "		
Nur Mahal's "		
Miscellaneous tombs in and around Lahore.		
Shahlimar gardens.	}	Delhi.
Tomb and mosque of Jamali Kamali.		
Humayun's tomb.		

Many of the works had been commenced before Lieutenant Abbott's appointment, and I found it necessary to recommend the numerous changes and modifications set forth in the Inspection Notes, pages cviii to cxii. The following projects for buildings have been modified or newly prepared by Lieutenant Abbott:—

Jahangir's tomb.	}	Lahore.
Shahlimar gardens.		
Naulakka pavilion in the fort.		
Fort historical buildings (petty repairs).		
Kila Kona mosque in Purana Kila.	}	Delhi.
Historical buildings in and around Delhi (petty repairs).		
Dewan-i-am in the palace.		

Besides these, Mr. Harrington, Executive Engineer, Jullunder, has most successfully carried out the projected repairs to the gateway at Nur Mahal, and has commenced repairs to two beautiful tombs at Nakodar.

A memorandum on explorations in Eusofzai is quoted at length, and describes the very interesting Græco-Bactrian sculptures that were obtained. I hope that something will be done annually until the whole district has been thoroughly examined.

North-
Western
Provinces
and Oudh.

18. Appendix K, relates to the progress during the year, of work in the Archaeological Division, North-Western Provinces and Oudh. An opportunity occurred in May 1880 of reporting on the restoration and preservation of architectural buildings in and near Agra (see Annual Report, 1881-82, page xxix), and the comparison at that time between the renovated and cared-for Agra monuments, and the aspect of ruin and neglect afforded by the Lahore and Delhi buildings, furnished the most convincing argument for the necessity of conserving the ancient monuments throughout India.

Sir John
Strachey's
system.

The system inaugurated at Agra was as simple as it was effective. An Engineer of general ability having been appointed, Sir John Strachey, then Lieutenant-Governor, issued his own instructions after personal and attentive scrutiny of each individual structure. The taste to discern what was necessary directed the operations, which were carried out in a workmanlike manner. Sir John Strachey was succeeded by Sir George Couper, who took less interest in monumental preservation, and the Archaeological Division has been threatened with changes; but the foresight of its originator had secured the requisite funds for completing certain definite operations, and momentary indifference or financial pressure passed harmlessly away.

Sir Alfred
Lyal's inter-
est in the
work.

The present Lieutenant-Governor, Sir Alfred Lyall, with cultivated appreciation has encouraged the work in the Archaeological Division by personal inspection of the monuments at Agra, Jaunpur, and Sarnath. The orders of his Government issued in June 1882 directed the Executive Engineer to prepare his projects and proposals in consultation with me before being finally dealt with. I have in this way been able to make some suggestions, notably those concerning the restoration of fresco paintings in the Fatehpur-Sikri and Sikandra buildings. The revival of the colored patterns in the arched entrances and interiors has wonderfully improved the appearance of the structures and brought to light one of their most characteristic and singular qualities.

Revival of
paintings.

I have also endeavoured to suggest *economical remedies*, Economical remedies as, for example, in the two cases of renewing the ceilings of the beautiful palaces known as the "Khas Mahal" and "Dewan-i-Khas" in the Agra fort. These buildings had many years ago been robbed of their heavy marble ceilings, and to support the flat roofs were subsequently furnished with iron joists which looked very unsightly from the interior. Mr. Heath's original estimates for replacing the ceilings in their massive integrity and completing the repairs to the two pavilions came to Rs. 1,60,633—an expenditure so obviously prohibitory that I recommended the use of iron joists as a support for a lining of thin marble slabs, and the revised estimates, aggregating Rs. 45,921, showed a saving of Rs. 1,14,712.

The works of importance in contemplation and requiring completion are— Works of importance to be completed at Agra.

- (1) The removal, from the Birbal house, Miriam house, and Akbar's office, at Fatehpur-Sikri, of the unsightly doors and appurtenances used in the buildings for the accommodation of travellers.

- (2) Complete renewal of all frescoes on ceilings, walls, domes, arches, &c., in the

Khas Mahal	} in the fort. }	Agra.
Jahangir Mahal		
Akbar's tomb.		
Etmad-ud-Dowlah's tomb.		
Mosque at Fatehpur-Sikri.		

- (3) Completion of repairs to the Jahangir palace, Agra fort, now possible, as the removal of the Provost Sergeant's quarters from one of the roof pavilions has been arranged for.

- (4) Complete and effectual custody of the restored buildings, to prevent theft of mosaic stones and damage of any kind.

It is most desirable that all the necessary military improvements to the Agra fort should be devised so as to interfere as little as possible with the architecture of the walls and buildings, and the Inspector-General of Military Works, Colonel Innes, V.C., R.E., has directed attention to this point. He has also ordered the carved pillars and walls of Akbar's palace at Allahabad, now used as an arsenal store, to be freed of whitewash. Military improvements in the Agra fort.

Sarnath
Tôpe.

An estimate has recently been sanctioned for repairs to the Dhamek Stupa at Sarnath near Benares.

Important
works still to
be undertaken
in the
N.-W. P.

A great deal of important work remains untouched in the North-Western Provinces, as, for instance, the ancient Muhammadan brick buildings at Budaun, some remarkable Hindu temples in the Banda district, the Chini-ka-roja at Agra, and some most singular brick and terra-cotta temples at Bhitargaon near Cawnpore. Nothing whatever has been done in Oudh.

Central Pro-
vinces.

19. Appendix L, contains a note on the buildings of interest on the island in the Narbadda river at Mandhatta. This is the only place I have had time to visit in the Central Provinces. A complete survey has been made of the island, also plans, &c., of the three principal temples on it, *i.e.*,—

The Siddeswar Mahadeva.
Omkar temple.
Somnath Gauri.

Besides these there are on the south bank of the river the temples to Vishnu and Mambleswar, both of which have been measured. The Siddeswar Mahadeva is unique in plan and ornament, and requires attention, being in a very ruined condition. My plans and notes with suggestions for repairs will be soon ready for submission to the Chief Commissioner, who will, I hope, depute an engineer to do what is requisite. I hope to gradually visit and have surveyed all the more important monuments of the Central Provinces.

Places not yet
visited.

20. Appendix M, gives a list of Provinces and Native States not yet visited.

Haiderabad.

21. Appendix N, refers to Haiderabad, Deccan, and describes what the Government of His Highness the Nizam has ordered to be carried out at Kalburgah, or has in contemplation with regard to the great mosque and historical tombs of that town. Kalburgah is the only place of interest I have been able to visit in Haiderabad.

List of forts.

22. Appendix O, furnishes a list of some of the ancient forts and citadels in the various Indian administrative areas.

Plans and
illustrations.

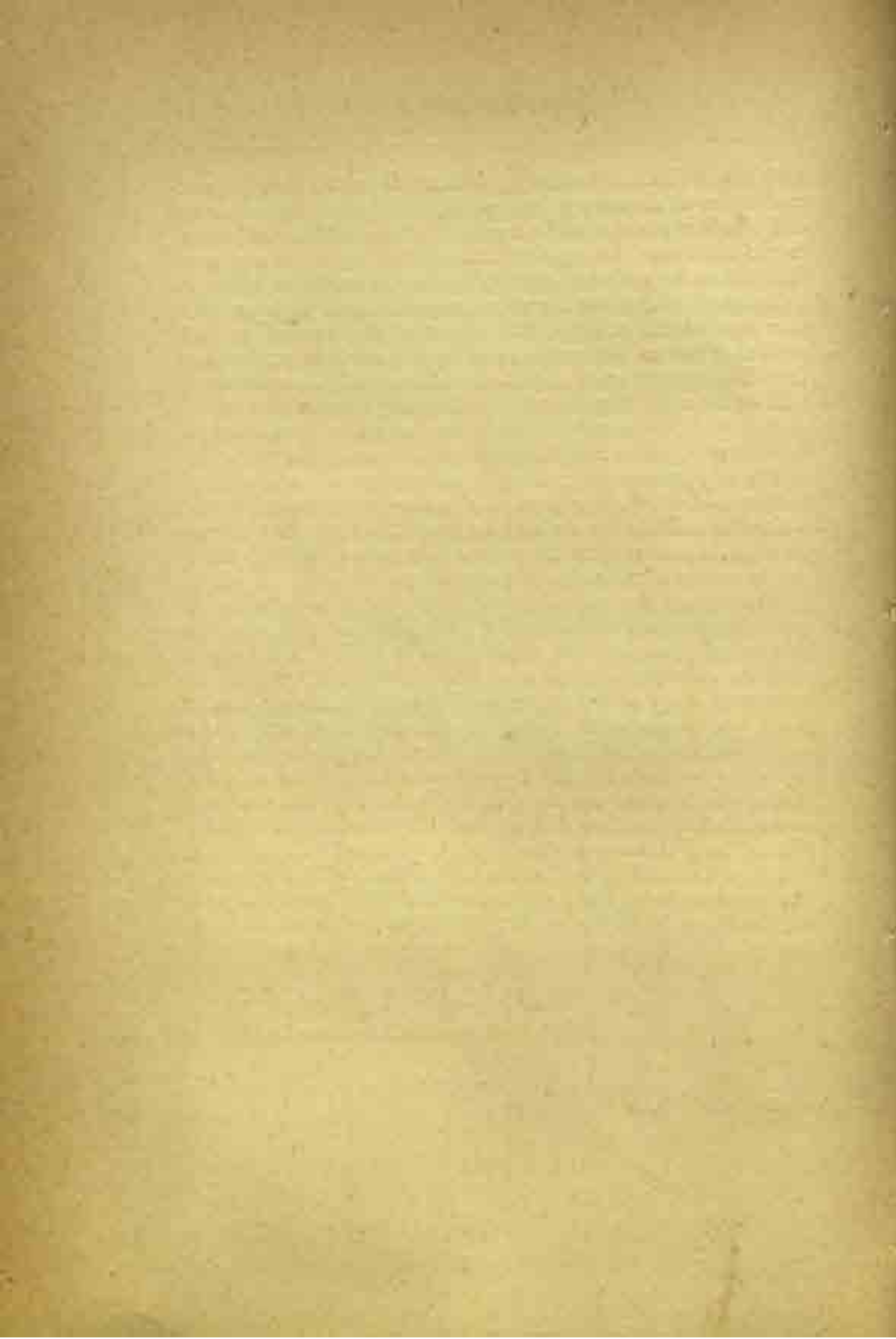
23. In conclusion, I beg to submit some observations in regard to the question of surveys and illustrations of monuments. The only way of securing attention to disrepair and neglect in important monuments, *in the use and charge of native princes or native communities*, is by careful surveys with specifications of what is requisite. It is in fact an economical way of getting work done in many parts of the empire. Plans and drawings are necessary for important projects un-

dertaken in British territory; without them no reliable estimates can be drawn out for repairs, and by no other means can errors in restoration be avoided. But besides the monuments that can be repaired or attended to, there are some that either the native owners will refuse to touch or allow to be touched, others that are so inaccessible as to be beyond the compass of the scheme, and others of the second or third rank that are so numerous as to be beyond the expenditure that Government can sanction. Plans and illustrations of such classes of monuments are the only records that can be preserved. A record of all styles of Indian architectural buildings by plans and drawings on an intelligible scale *can be the only means of reviving a knowledge of Indian architecture and art.* At present if a native chief or gentleman wishes to build in the style of his forefathers, he has to rely on what is preserved in the brain of his native builder. There are no works of reference of practical use.

As regards decorative art for rendering Indian manufactures popular and for increasing their demand, the most important of all sources for new designs is native architecture, with its marvellous elaboration and variety. At present the untrained fancy of the artisan is the usual guide for modern work, and is too often corrupted by uneducated attempts to reproduce and adapt European patterns. *I beg to suggest that my office be commissioned to prepare a work to be issued in parts, which, when complete, will illustrate in chronological order the architecture and art of the Buddhists, Hindus, Jains, and Muhammadans.* Major-General Cunningham, Director General of the Archaeological Survey, has suggested the joint production of a volume on the "Buddhist Sculptures of Gandhara," and this might, with propriety, form one of the series.

H. H. COLE, Major, R.E.,
Curator of Ancient Monuments in India.

September 1883.



Appendix A.

Lists of some Principal and other Native Architectural Buildings in Bengal, N.-W. Provinces and Oudh, Punjab, Kashmir, Rajputana, Central India, Central Provinces, Haiderabad, Mairat, Burma, Madras, and Bombay. (Revised and added to.)

Bengal.

Some Principal Ancient and other Native Architectural Buildings in the Lower Provinces of Bengal.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
BURDWAN DIVISION.						
<i>In the official list some 25 objects of interest are described.</i>						
Tomb of Bahram at Burdwan; Shri Agha, the first husband of Nur Jahan, said to be buried here.	Built 300 years ago; the tomb of a Muhammadan poet Bahram Sakhar.	Custody desirable.	Said to be fair.		None.	None.
Bishnupur Temples, in the Burdwan District.	Brick and terra-cotta buildings; history unknown.	Ditto.	Fair, but overgrown with trees.		None.	None.
The so-called "Five Jewelled" Temple at Goutpur, in the Midnapur District.	About 132 years old; said to be very ornamental.	Ditto.	Overgrown with vegetation.		None.	None.
Khargurh, in the Midnapur District.	A fort dating 1400 A.D., with two gardens sculptured in a man and his wife on horse-back.	Ditto.	In ruins.		None.	None.
Minarab at Pandmah, in the Hughli District.	A tower, probably of victory, and said to be a minaret; an interesting remains; date thirteenth century.	Ditto.	—		None.	None.
PRESIDENCY DIVISION.						
<i>In the official list some 60 objects of interest are described.</i>						
Hindu Temple, Jattar Doud, at Diamond Harbour, 24-Pargannas.	A specimen of very fine brick-work; the bricks said to be carried, probably from Calcutta, about 1750 A.D.	Custody desirable.	—	Special investigation necessary.	None.	None.

Bengal—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
PRESIDENCY DIVISION—continued.						
The five Gumbazs, or Sixty Domes, at Bagurhat, in the Jessor District.	A massive brick building, dated about 1438 A.D., built by Khanja Ali.	The inside is kept clean by an old man, who gets money from pilgrims.	The masonry in fair order; repairs wanted on the outside face; the roof is covered with jungle.	Special investigation necessary.	None.	None.
Pir Ali's Tomb at Bagurhat, in the Jessor District.	Dated about 1438 A.D.	In charge of two fakirs, who hold 308 bighas of land for the service of the place under a very ancient grant.	Repairs wanted.		None.	None.
Temple of Krishna at Mulhar-mahar, in the Jessor District.	An elaborate building with tracery and terra-cotta ornament; dated 1793.	Custody probably desirable.	Signs of decay are showing.		None.	None.
Malbarra of Mureed Kuli Khan, the founder of Mirshadabad.	A building of good proportion erected in the lifetime of Mureed Kuli Khan (who reigned 1794–1795) out of materials of Hindu temples destroyed for the purpose.	Supposed to be robbed after by the Nizam Nazim.	.....	.....	None.	None.
RAJSHAHIE AND COOCH BEHAR DIVISIONS.						
<i>In the official list some of objects of interest are described.</i>						
The Boddal Pillar, in the Dinagepur District.	A relic of the Pal Kings.	Custody desirable.	The pillar is still standing.		None.	None.
Two Muhammadan Shrines at Debent, in the Dinagepur District.	The report calls Debent the first Muhammadan capital of Bengal; very early inscription of Kaluar Shah of one shrine.	Ditto.	Deserves to be preserved.		None.	None.
Muhammadan Tombs at Harnatabad, called Bazar-ul-din, in the Dinagepur District.	A mosque close to the tomb, in fair preservation; there are numbers of Hindu carved pillars and stones about; signs of Buddhist totem in the neighbourhood.	Ditto.	Much neglected.	Investigation necessary.	None.	None.

Temple of Gopal at Gopab- gunji, in the Dinagpur District.	Temple dating from 1742 A.D., with carvut brick and terra-cotta ornament.	Date	Surrounded by un- der and falling into decay.	Specie	None.	None. See Fer- guson's Indian Architecture, page 407. Details would be valuable. See Ferguson's Indian Architec- ture, page 407.
Temple at Kannanagar, 12 miles from Dinagpur.	Finished in 1721; a brick build- ing covered with terra-cotta.	Ditto	Preservation disas- table; is said to be kept in repair by the family of the late Raja of Di- nagpur.	.....	Has been photo- graphed.	None.
Temple of Siva at Julseah, in the Jalpaiguri District.	The most conspicuous ruin in the district; built of very durable brick; began 250 years ago.	Ditto	Fair	.....	None	None.
Dacca Division.						
In the official list some 36 objects of interest are described.						
So-called Tomb of Chize- al-din at Sonargam in the Dacca District.	The masonry beautifully carved.	Carefully necessary.	The report says it might be easily re- paired.	Special investigation neces- sary.	None	None.
Gharibullah's Mosque at So- nargam, in the Dacca Dis- trict.	A modern mosque, 1768 A.D., with pinnacles of glazed pottery.	Ditto	.....	.....	None	None.
Old Mosque at Gaudh at So- nargam, in the Dacca Dis- trict.	Dates 1379 A.D.; of red brick with carved stone-work inside and carved brick (terra-cotta).	Twenty-six years ago used for worship, but now abandoned for a more modern building close by.	Threatened with ruin	.....	None	None.
BHAGALPUR DIVISION.						
In the official list some 58 objects of interest are described.						
The Khajuri Masjid, or rather mosque, at Gaya, Malah District.	A stone building; 375 years old; built in the reign of Sultan Hu- san Shah, King of Gaya.	Carefully necessary.	Fair preservation.	.....	None known	See Raven- shaw.
Mosque called the Kallim Ras- aul at Gaya.	An interesting brick building; about 350 years old; the brick- work is said to be carved, but may be in really terra-cotta or baked "moulded" bricks.	Not known; worthy of study.	Worthy of being kept entire.	The expe- diency of restoration requires in- vestigation.	See Ferguson.	See Raven- shaw.

Bengal—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
BRAGALPUR DIVISION—continued.						
Misur at Gaur	According to Ferguson, a pillar of Victory; date 1503-15 A.D.	Custody desirable	Wants clearing of vegetation or will tumble down.	The question of restoration requires special investigation.	None known	See Ravenshaw.
The Golden Mosque at Gaur	Remains of a fine stone building; 304 years old.	Ditto	Preservation seems desirable.			
Kutub Shah's Graveyard at Purnah or Panduah, in the Midnah District	An enclosure containing many tombs and Kutub's dwelling house, in which are coloured tiles.	The place is held sacred still.	.....		
The Adinath Masjid and Tomb at Silauden at Purnah, or Hazrat Panduah, Midnah.	Erected A.D. 1598-97; much decorated with tiles and carvings in stone; is the finest and largest example of Bengal-Pandua.	Custody desirable	Ruin			
Mausoleum of Jalal-uddin Muhammad at Hazrat, Panduah.	A fine example of the Bengal-Pandua.	Ditto	.....		
Jami Masjid at Hadur, 4 miles from Rajmahal, in the Sonapat Ferganah.	A beautiful building; built A.D. 1592 by Miran Singh, Akbar's Rajput General.	Ditto	In bad condition	.....	None known	None known.
CHITTAGONG DIVISION.						
<i>In the official list some 13 objects of interest are described. No building which appears of special interest.</i>						
PATNA DIVISION.						
<i>In the official list some 60 objects of interest are described.</i>						
Nalanda Monasteries at Buegam, in the Patna District.	Buddhist ruins, full of interest; many sculptures of great beauty.	Excavations have been made.	Ruin	Impossible	None	None.

Rains of Rajm in Bolpur sub-division, in the Patna District.	Buddhist ruins of Bahargura, the ancient capital of Magadha.	Custody desirable	Ruin	Ditto	Name	See Cunningham.
Sculptures of all kinds (Hrahmanical and Buddhist) collected by Mr. Broadway at Bobar.	Some of these are most valuable, but out of place where they are, and should be in Calcutta.	.....	.....	.....	Photographed by Mr. Beglar.	.....
Great Buddhist Temple at Boudha Gya, in the Gya District.	This is a fine and most interesting brick building; masses of carved stones to be found around the ruins; date first century B.C.	Custody desirable	Has been completely restored at a cost of some Rs. 8,000, and is full and pictorial (1883).	.....	Has been photographed by Mr. Beglar, Executive Engineer.	See Cunningham, Parganna and Lalita Mitra.
Buddhist Temple and Caves in the Barabar Hills in Jahanabad sub-division, Gya District.	The caves are carved in the granite rock, and vary in age from 250 B.C. to among those the celebrated "Khami, Chuppi," the "Sutarna," and "Loamat Rishi" caves.	.....	Good	.....	.....	See Ferguson and Cunningham.
Buddhist remnant at Dharawat, north of the Barabar Hills, in the Gya District.	Extensive mounds about the present village; also a small temple with a standing figure of Buddha.	Custody desirable	Ruin	.....	Name known of	Name known of.
Remains at Kouth, in the Gya District.	Mounds and Buddhist figures scattered about; also a large temple with beautiful moulded bricks.	Custody desirable	The temple suffers year by year from rain, and will soon be a mass of rubbish if nothing is done.	.....	Ditto	Ditto.
Tomb of Humayun Khan, father of Sher Shah.	An octagonal stone building of considerable merit.	Is in custody	Requires small repairs.	.....	Has been photographed.	.....
Sher Shah's Tomb at Sasaram, in the Sherahat District.	A fine old Pathan tomb; about 1599 A.D. One of the finest specimens of Pathan art in Bengal.	Is in custody	An estimate for repairs has been prepared and the work is progressing under Mr. Beglar.	.....	Has been photographed by Mr. Beglar, Executive Engineer.	See Ferguson.
Ruin and Buildings at Rohtas Fort, in the Shahabad District.	Sher Shah captured this fortress in 1539 A.D.; Man Singh, Viceroy of Bengal, erected all the buildings now existing in A.D. 1634.	Ditto	Ruin	Mr. Beglar has prepared a rough estimate for repairs.	Name known of	Name known of.

Bengal—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
PATNA DIVISION—continued.						
Blunt Singh's Lal, an Ellora pillar of Asoka near Sarya, 18 miles southwest of Muzaffarpur.	The pillar is a monolith with a carved lion capital; height above ground about 30 feet; date about 250 B.C.	Since 1903 Englishmen have cut the pillars on the pillar; it is in the courtyard of an Arab-mans' house.	Good	.....	None known.	See Ferguson, Gunning, and Kitce.
Buddhist Mounds and 'Edict' Pillars in the district of Champaran.	There is a fine lion pillar at Laxmipura (Aurang), 15 miles from Bistah.	Custody desirable.	Ruin	.....	Ditto	See Ferguson and Cunningham.
<p style="text-align: center;">ORISSA DIVISION.</p> <p style="text-align: center;"><i>In the official list some 25 objects of interest are described.</i></p>						
Temple at Chandawar.	A building with beautifully carved mouldings and sculptured panels.	.....	.....	.....	Photographed by Mr. Beglar.	.....
Hindu Pillar at Chandawar-Jajpur, in the Cuttack District.	A stone column about 23 feet high, supported originally by Garuda, which has half a mile off.	Custody desirable.	Fair	The question of how far restoration is possible or expedient requires special investigation.	Has been photographed. See Ferguson.	None known.
Buddhist remains in the Ali Hills, Jajpur, Cuttack District.	Have been imperfectly explored.	.....	.....	.....	.....	.....
Temple of Jagannath at Puri, in the Puri District.	Built 1085 A.D.	Used for worship &c.	Fair	The question of how far restoration is possible or expedient requires special investigation.	Has been photographed. See Ferguson.	See Ferguson and Ishu Rajendra Lal Mitra.
Great Temple at Bhuvaneswar, in the Puri District.	Date about 675 A.D.; a very elaborate Hindu temple.	Used for worship.	Fair	The question of how far restoration is possible or expedient requires special investigation.	Has been photographed.	See Ishu Rajendra Lal Mitra's book.
The Black Pagoda or Kanarha at Kanarha, in the Puri District.	Date about 875 A.D. (there are various theories as to date); a very elaborately carved Hindu building.	Custody seems desirable.	Fair	.....	Ditto.	See Ishu Rajendra Lal Mitra's 'Antiquities in Orissa'.

CHOTA NAGPORE DIVISION.

In the official list some 11 objects of interest are described.

Temples at Barakar	Small square structures with pilasters. The pilasters and basements are very curiously treated with twisted pillars ending in small capitals with Hindu Devien.	.....	.....	.....	Photographed by Mr. Beglar.
Brick and Terra-Cotta Temples at Para, in the Manbhum District.	Some of the brick work is very good.	.....	.....	.....	Mr. Beglar has taken photographs.
Fort and Palace of the Pashais Rajahs at Pachero, Manbhum.	Ruins, temples, towers, &c., of fine stone and terra-cotta work.	Apparently none	Ruins	.....	None
Jain Temples at Telcopy, Manbhum.	Stone temples, with elaborate carvings.	.....	Riding the river Damsuda is washing the buildings away.	.....	None
Jain Temples at Parimath, Hazaribagh District.	A place of Jain Pilgrimage.	.....	.....	.....	See Ferguson.

N.B.—The sacred Vulture of Vishnu.

N.-W. P. and Oudh.

Some Principal Ancient and other Native Architectural Buildings in the North-Western Provinces and Oudh.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
<i>In an official list of 1876, 123 objects of interest are mentioned.</i>						
A Stone bearing name of Asoka's inscriptions at Harappur, near Kabi, Dehra Dun District.	Is in a good state of preservation; but the inscription is somewhat worn by age.	.....	.....	.....	.....	.....
Large Figure of Buddha and Lion at Pinduliat, Manbhum District.	Is an object of devotion; protected by a Hindu Temple.	.....	Said in 1878 to be in good preservation.	.....	.....	.....

N. W. P. and Oudh—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Group Bhupat and Capital at Sankasa, Feroz District.	The capital of one of Ananta's edicts pillar, 250 B.C.	.....	.....	.....	.....	.....
A Temple at Mahabadi, two miles from Kahrui, two miles out of Banda on the road to Mahabadi.	Consists of three separate shrines arranged round a central one which has an approach or passage. It is of granite very deeply carved.	.....	.....	.....	.....	.....
Remains of Kanauj formerly the Hindu capital of Northern India.	The remains of interest are—the ruins of the old palace called Rang Mahal; the Hindu pillars of the Jami Masjid; the Hindu pillars of the Masjid of Mahabadi; the village of Singh Bhawan; besides these there are numerous mounds covered with broken bricks, carvings, &c.	Custody most desirable.	.....	.....	.....	See Cunningham's <i>Archæological Report</i> , Vol. I.
Buddhist Temples at Saranath, near Benares.	A large temple covered with stone sculptures of great beauty; date about 500-600 A.D.	Ditto.	An estimate for repairs has been transmitted.	.....	Has been photographed.	See Cunningham and Ferguson.
Jami Masjid at Badaun.	A fine specimen of Ghori Pathan building; A.D. 1225.	Custody desirable.	Mr. Colvin, Lieutenant-Governor, gave Rs. 200 for repairs. Well worth preserving. Should be repaired.	A return of 1875 states that the chintors that stood to the right and left of the front of the mosque, have been pulled down to secure material for repairing the main parts of the building.	Worth photography.	Note.
Algarh at Badaun.	This is a structure of some interest built by Shams-ud-din; 1209 A.D.	Is in custody.	.....	.....	Worth photography.	Illustrations of the brick work would be valuable.

Tomb of Chinnī Khan at Badaun.	Highly decorated with brick work, dating from the time of the Sikander Lodis.	In custody			Ditto	Illustrations would be valuable.
Raja's Palace at Srinagar, in Garhwal, said to date 1558 A.D.	Is built of stone, parts of which are elaborately carved.			Requires clearing and small repairs.	Ditto	Ditto
Converted Temple at Mahakasa, dating from the 10th century, called the Chhatra Pāna.	A stone colonnade of sculptured pillars, rooded over by Aurangrah, to serve as a mosque.	Now in custody of Hindus.		Was required in 1876 by Government.	Has been photographed.	
Sculptured figure of Buddha at Vaidhuta, 3 miles north of Muzaffabad, Manipal District.	Scathed on a throne with lions and elephants at the base and sides.	Requires investigation.				
Five and other temples at Masahala, Rampur District.	Fine massive buildings, 900 to 1100 A.D.	Repairs commenced.			Several photographs taken.	
Fami Masjid at Jaunpur	1490-91 A.D.; a grand and massive building of the Jaunpur Pathan type.	Being restored. Drawings have been made by Mr. Heath.			Ditto	See Ferguson.
The Mala Masjid at Jaunpur	Very ornate and beautiful; the finest Jaunpur Pathan building.				Ditto	
Lall Darwaza Mosque, Jaunpur.	This is the smallest of the mosques in Jaunpur; is massive and in the mixed style.				Ditto	See Ferguson.
Akbar's Palace at Fatehpur-Sikri near Agra.	A beautiful collection of buildings of a mixed Hindu and Muhammadan style.	Under the Archaeological Department, N.-W.P.			Ditto	See Ferguson and Buildings near Agra by Col.
Hall in the Palace at Allahabad.	Built in Akbar's time.	Now used as an arsenal.				See Ferguson.
Falahpur-ki Masjid near the Taj.	A building of the later Mogul style, in a watering condition.			Should be prevented from ruin.		
Mouddah at Etah, Ghazipur District.	A handsome column of the Gupta period with inscriptions.	Should be fenced in			Not photographed.	

*N. W. P. and Oudh—contd.
Principal Ancient and Architectural Buildings, &c.—contd.*

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
<i>Tomb of Feroz Khan, near Agra.</i>	Erected in Akbar's time; very handsome.	Has been cleared and thoroughly repaired.	.....	.....	Has been photographed.	.....
<i>Hindu Temple at Bindrahan, near Mulera.</i>	Erected in 1523-1615 A.D.; a remarkable building, being a mixture of Hindu and Muhammadan art.	Has been restored by Government, in co-operation of Native priests, and its integrity should be secured as much as possible.	.....	Under the Archaeological Department, Mr. Heath has prepared drawings.	Ditto	See Ferguson and Cole.
<i>Tomb of Khayia Athar Khan, near Sikandra, Agra.</i>	A good specimen of early seventeenth century Mogul architecture.	.....	Has been repaired by Mr. Heath.	.....	Has been photographed.	.....
<i>Tomb of Sadik Khan and Salabat Khan, near Sikandra, Agra.</i>	Good specimen of the architecture of Shahjahan's time.	Have been cleared of the inhabitants and repaired by Mr. Heath.	.....	Under the Archaeological Department, Mr. Heath has prepared drawings.	Have been photographed.	.....
<i>Akbar's Tomb at Sikandra</i>	A very beautiful mausoleum	Has been restored; the surrounding walls and gateway are in hand.	.....	.....	.....	See Ferguson.
<i>Fort at Agra</i>	Contains fine buildings of Jahangir and Shah Jahan.	Is almost completely renovated. The Sunnith gates require attention.	.....	Under the Archaeological Department, Mr. Heath has prepared drawings.	Has been photographed.	.....
<i>Taf Mahal</i>	A beautiful marble tomb of Shah Jahan and his wife.	Has been completely restored.	.....	.....	Ditto	See Ferguson. Well drawn.
<i>Tomb of Humayun at Agra.</i>	Built in the reign of Jahangir, A.D. 1605-81; a beautiful building of marble and mosaic.	All has been restored except the fresco paintings.	.....	.....	Ditto	.....
<i>Tomb of Shah Abdul Razak at Jhansi, Muzaffarnagar District.</i>	Is a handsome structure, built of stone and brick, and has a coloured tile dome.	.....	Said in 1828 to be kept in repair by the house of Shah Abdul Razak.	.....	.....	.....

Maajid in the old City of Koet, Allahabad District.	This mosque was built 140 years ago; soon it once stood an ancient minar erected in 1253 A.D., which, after the Mutiny, was pulled down for municipal improvements.	.....	Under repairs by the Muhammadan community, but not well done.	.....	.....	.....
Mosque of Nuhbi Sahib in the market place, Muttra.	Built by Ghulam Nuhbi, Governor of Muttra, 1665 A.D., a central building with four handsome minarets with coloured tile work.	.....	.....	.....	.....	.....
Sculptures, mostly Buddhist, in the Museum at Muttra.	These valuable sculptures should be more accessible for inspection.	.....	Should be removed to the Provincial Museum.	.....	.....	.....
Temple of Hardeoiji at Geste-dhun.	A carved building of red sandstone, built 320 years ago by Raja Bhugwan Das of Muktan.	.....	Was partly destroyed by Aurangzeb and repaired by the Raja Jai Singh of Jaipur.	.....	.....	.....
Zamindar's House in Lakhowa near Sheoharabad, Malpuri District.	Built some 70 years ago; said to be a very remarkable specimen of modern domestic native art.	.....	Used to be repaired by Government before the Mutiny.	.....	.....	.....
Jami Maajid in Pilibhit, Bareilly District.	A handsome building, said to be well worth preserving.	.....	Kept in repair by the Maharaja of Benares.	Has been photographed.	.....	.....
The Sunari temple at Ramnagar, in the Benares District.	A handsome temple, begun about 100 years ago, completed by the present Raja of Benares; is covered with handsome balustrades.	.....	Much ruined and decayed.	.....	.....	See Cunningham's ham.
Chini-ka-Rora at Agra.	Of Aurangzeb's time; a monument covered with blue enamel.	.....	.....	.....	.....	See Prinsep's <i>Vases in Benares</i> .
Temple of Vahvashwar at Benares.	About 150 years old.	.....	.....	.....	.....	See Prinsep's <i>Vases in Benares</i> .
Ghoda Chat, Benares.	A modern stone building.	.....	.....	.....	.....	See Prinsep's <i>Vases in Benares</i> .
Khura Bagh at Allahabad.	A garden with the tombs of Khuras, his mother and sister (Jahangir's period).	.....	Has been particularly repaired by the Allahabad Municipality.	Has been photographed.	.....	.....

N. W. P. and Oudh—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Hindu carved stones of the Gupta period in the Fort of Gorkha, 20 miles south-west of Allahabad.	The square pillars forming Tunga gateways should be obtained from the Raja of Bara for deposit in a Museum.	.....	.....	.....	.....	See Vol. X, Archaeological Reports.
Capital of the Indo-Scythian period formerly at Mattia.	Was removed by Dr. Bhaudail to Bombay, and is now in possession of his heir. Should be removed for the North-Western Provinces Museum.	.....	.....	.....	.....	.....
Aulka Column at Hathin near Zamaniah, Ghazipur District.	Has a capital and is 25 feet high. The figures which surmounted the pillar are on the ground.	.....	.....	The figures should be replaced on the top.	Not photographed.	.....
Remains of a Hindu temple at Dillanagar, Ghazipur District.	A number of carved stones and sculptures might be removed to a Museum.	.....	.....	.....	Not photographed.	.....
Ruins of an ancient City at Bhates near Palla in Khuri District, Oudh.	This is worth exploration; some pottery, terra-cotta, and sculptures have been found.	.....	Any existing fragments should be removed to a Museum.	.....	.....	See Vol. XI, Archaeological Reports.
Fragment of a Hindu temple at Neral near the Ganges, Cawnpore District.	General Cunningham found numerous terra-cottas here in abundance.	.....	Well worth preservation. General Cunningham removed some pieces of terra-cottas.	.....	Has been photographed by Mr. Beglar.	See Vol. XI, Archaeological Reports.
Dhitaragan, 20 miles south of Cawnpore, Pargana Sarho, Sahampur.	The one large temple dates 4th or 5th Century, A.D., and is covered with panels of terra-cotta representing Brahminical subjects.	.....	Brick arches are used inside.			

Punjab. Some Principal Ancient and other Native Architectural Buildings in the Punjab.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
<p>DELHI DISTRICT.</p> <p><i>In the official list some of buildings are described.</i></p>						
<p><i>Remains at the Kutub, near Delhi.</i></p>	<p>Historically of the highest interest, being the most important mark of the Muhammadan conquest of India; is situated about 11 miles from Delhi.</p>	<p>It is not known whether the custody of all buildings is of a systematic character.</p>	<p>The Kutub Minar is fairly preserved; other buildings require attention; all buildings should be made secure and destructive vegetation kept down.</p>	<p>Repairs about to be undertaken.</p>	<p>Photographs by Bourne and Shepherd and others. Also see <i>Architecture of Ancient Delhi</i> by H. H. Cole, published by Arnold Sons.</p>	<p>See Ferguson and Cunningham.</p>
<p><i>Tomb of Maulvi Fatah Khan, near Delhi, in the neighbourhood of the Metcalfe House at the Kutub.</i></p>	<p>Decorated in a beautiful and interesting way with coloured unglazed tiles; date 1555 A.D.</p>	<p>Custody desirable.</p>	<p>The ground has been purchased and the tomb and mosque repaired.</p>	<p>.....</p>	<p>No photographs known to exist.</p>	<p>Drawing made in my office.—H. H. C.</p>
<p><i>Recent Tombs and buildings around Delhi.</i></p>	<p>Chiefly Pathan and Mogul.</p>	<p>Ditto.</p>	<p>Very variable; preservation in many cases most desirable.</p>	<p>.....</p>	<p>Some photographs by Bourne and Shepherd.</p>	<p>Many noticed in Ferguson; also see Cunningham, Vol. IV. Many drawings in my office.—H. H. C.</p>
<p><i>Kila-Koria Mosque in Ferozepore, Kila, Delhi.</i></p>	<p>One of the finest buildings of Sher Shah's time.</p>	<p>.....</p>	<p>Will be repaired; extensive restoration.</p>	<p>.....</p>	<p>Has been photographed.</p>	<p>Drawings in my office.</p>
<p><i>Humayun's Tomb, near Delhi.</i></p>	<p>Early specimen of Mogul architecture, 1556 A.D., in marble and sandstone.</p>	<p>Systematic custody desirable.</p>	<p>Ground has been purchased from cultivators.</p>	<p>.....</p>	<p>Photographed by Bourne and Shepherd.</p>	<p>Drawings in my office.—H. H. C.</p>
<p><i>Chamash Khambar, a tomb 3 miles from Delhi; date 1600 A.D.</i></p>	<p>A Muhammadan tomb decorated with beautiful coloured marble screen-work.</p>	<p>Ditto.</p>	<p>In fair order, but some serious mutilation.</p>	<p>Probably desirable.</p>	<p>Ditto.</p>	<p>See Cunningham, Vol. IV. Details of tracery would be valuable.</p>

Punjab—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
DELHI DISTRICT—continued.						
<i>Qutub Masjid in Delhi; date 1193 A.D.</i>	A beautiful Mosul mosque still in use.	In custody of the Mughal Government.	Slight repairs wanted.	.....	Photograph by Bourne and Shepherd.	Illustrated in Ferguson's Architecture.
Asoha's Pillar, on the ridge in the old station, Delhi.	A Buddhist Lat; about 300 B.C.	Systematic custody desirable.	Recently set up (1873).	Unnecessary	None known	None known.
Zinat-ul-Masjid	A mosque with tomb; date A.D. 1710.	.....	.....	.....	Ditto	Ditto.
Fitahpur Masjid	Mosque at end of the Chandni Chowk; A.D. 1516.	In use	Repairs and improvements contemplated.	.....	.....	.....
Palace in the Fort at Delhi; date about 1638 A.D.	Built by Shah Jahan. The Dargah is richly ornamented with mosaic and white marble, and is painted red; other buildings, such as the Masjid and King's Bath, are highly ornamental and full of interest.	In charge of the Military Works Department. Buildings requiring repairs are made over to the Ancient Monument sub-division.	Repairs have begun and will be thoroughly carried out.	.....	Bourne and Shepherd have photographs.	Plans said to be in the Military Department. See also Ferguson's <i>Drawings in my office—H.H.C.</i>
Jain Temple in Delhi	Built in the beginning of the present or end of the last century; singular for its beauty and ornament.	In use	.....	.....	Ditto	Details of the structure would be interesting. See Ferguson.
GURGAON DISTRICT.						
<i>In the official list some of buildings are described.</i>						
Lal and Kala Domes, near the hills at Sohna, about 1 mile from the Town of Gurgaon.	Buildings known as the red and black domes; they are decorated with sculptures and are reported to have been built by Khizrabad; date unknown.	Custody desirable	Dilapidated; information wanted.	.....	None	None.
Kutchi Khan, in the boundary of the Town of Gurgaon.	A domed building of chunam and stone built by Kutchi Khan, Khizrabad, Mughal of the Emperor, about 400 years ago.	The inhabitants of Sohna use it as a cattle-shed.	Dilapidated; it is hand-some and should not be allowed to decay further.	.....	None	None.

Name of Mosque, 2 miles from the Tahsil Gurgaon.	A. mosque and tomb in chunam and red stone; the tomb has a handsome trellis screen, built by Nawab Aliwardi Khan about 150 years ago.	Not used.	Disappeared; the tomb deserves respect, but is fast decaying.	.....	None.	None.
Solna Mosque, near which are two hot and cold springs.	The old buildings are said to be a thousand years; the mosque dates from Shah Alam.	Used by inhabitants; no use of custody unknown.	Good	.....	None.	None.
Farakhan Mosque, in the Town of Farukhanagar.	Built by the Nawab of the place in the reign of Muhammad Shah, 1753-54 A.D.; decorated with carvings.	Used for worship.	Good	.....	None.	None.
Hindu Temple at Sit Sai, 10 miles from Tahsil Palsal.	A building of chunam and stone with coloured frescos, about 224 years old.	Ditto.	Fair	.....	None.	None.
Modern Tank and Chattri at Chudiwala.	Two chattri is of chunam and stone, and is decorated with sculpture.	This tank used for bathing; no information about custody.	Good	.....	None.	None.
Mosque at Malab.	A building of chunam and stone with coloured decorations; built 220 years ago.	Used for worship; no information as to custody.	Good	.....	None.	None.
Muhammadan Shrine in memory of Allah Yar Khan in Ferozepur.	A monument, 40 feet square, of stone and chunam, with ornamental carvings; built 275 years ago.	A tank lies in the shrine; no other custody known.	Fair	.....	None.	None.
Jami Masjid, in the Town of Ferozepur.	A modern building with coloured decoration.	Used for worship.	Fair	.....	None.	None.
Tomb near Karnal, on the Trunk Road, called Dargah Kalandar Sahib.	A masonry enclosure, with a mosque and fountain; the tomb itself is of marble with sculptured decoration. It was built by Ghazal-ud-din, Emperor of Delhi, in memory of a tank (1335 A.D.).	Sacred place of Muhammadans; no information as to custody.	Good	.....	None.	None.
Muhammadan Tombs in the city of Panipat.	Decorated with marble sculptures; date 1325 A.D.	Sacred Muhammadan place; no information as to custody.	Good	.....	None.	None.

KARNAL DISTRICT.

In the official list some 55 buildings are described.

Punjab—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawing or plans.
KARNAL DISTRICT—continued.						
Khalid Bagh, 1 mile from Panipat.	Formerly a mausoleum and evident built by the Emperor Babur (to commemorate the victory over Ibrahim Lodi; A.D. 1527).	Not known.	The garden has disappeared; the mosque requires repairs.	.....	None.	None.
Mausolee of Shahdih Tyab, inside the city of Karnal.	A masonry building of the time of Akbar; the cupola is covered with enamel.	Not known.	Requires repair.	.....	None.	None.
HISSAR DISTRICT.						
<i>In the official list some 30 buildings are described.</i>						
Joni Masjid, in the Town of Hissar.	A brick building, 350 years old; decorated with coloured tiles.	Used for worship; no information as to custody.	Fair.	.....	None.	None.
Mosque near Hissar in the area close to the Delhi Gate.	A brick building, 325 years old; decorated with coloured tiles.	Idem.	Fair.	.....	None.	None.
Tomb near Hissar.	An old domed brick building with coloured tile decoration; said to be 500 years old.	Occupied as a residence by the Deputy Commissioner.	Said to be much neglected.	.....	None.	None.
Barel Darwaza, one of the gates of Hissar.	A brick gate, decorated with coloured tiles.	No information as to custody.	Fair.	.....	None.	None.
Domed Shrine at Tobana.	A brick building, decorated with tiles of various colours; built 300 years ago by Asaf Khan, Pathan.	Not occupied; no information as to custody.	Fair.	.....	None.	None.
Mosque in Tobana.	A brick building, erected 250 years ago by Mir Asaf; it is decorated with red, blue, and yellow tiles.	Used for worship; no information as to custody.	Fair.	.....	None.	None.
ROHTAK DISTRICT.						
<i>In the official list some 20 buildings are described.</i>						
Seven tombs at Jasjar.	These are of stone, Muhammadan in style; and one building has coloured decoration tiles; about 250 years old.	Not known.	Good.	.....	None.	None.

Alangiri Mosque at Badi	A stone building erected by Aurangzeb Alamgir, about 200 years ago.	Used for worship; custody not known.	Needs repairs.	None.	None.
SIRSA DISTRICT.					
<i>In the official list some buildings are described.</i>					
Hindu Temple outside the town of Hissar.	A plastered brick building with coloured ornament; about 200 years old by repair.	Used by Hindus; custody not known.	Fair.	None.	None.
UMBALLA DIVISION.					
<i>In the official list some buildings are described.</i>					
Mohammadian Tomb, 12 miles west of Shahabad Thana.	A masonry building about 1710 A.D.; is the tomb of Shah Bihl and of an architectural character.	Used by Muhammadians for worship; mode of custody unknown.	Very good.	By Land, Secretary, Assistant Commissioner, Umballa.	None.
Jami Masjid at Thanesar.	A solid masonry building; 1400 A.D.	Not in use; no custody known of.	In ruins.	Ditto.	None.
Gateway of the Old Fort of Thanesar.	Solid masonry building; a good specimen of Mohammadian architecture; 1400 A.D.	Partly inhabited.	In ruins; part of the remains are tolerably perfect.	Ditto.	None.
Mosque at Sadhwara, 25 miles north-east of Umballa.	Solid masonry; date 1400 A.D.	Not in use.	In ruins.	Ditto.	None.
Old Mohammadian House at Bura, 5 miles from Jagadri.	A curious masonry house with coloured decorations inside; built by Shah Jahan 1630 A.D.	No custody.	In ruins.	Ditto.	None.
Diara Mansab at Fajpur, a Temple standing in water.	Very ancient; built of blue stone.	Not known.	In order.	None.	None.
SIMLA DISTRICT.					
<i>In the official list some buildings are described.</i>					
Hill Temples.	Many very picturesque and curious wooden deotas or Hindu temples worthy of photography, description and preservation.	No official list.	.....	.....	.....
HILL STATES.					
<i>In the official list some buildings are described.</i>					
Diara Mansab at Fajpur, a Temple standing in water.	Very ancient; built of blue stone.	Not known.	In order.	None.	None.

Punjab—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings	General character.	Condition.	Preservation.	Restoration.	Photographs.	Drawings or plans.
LUDHIANA DISTRICT.						
<i>In the official list some 45 buildings are described.</i>						
Mosque and Tomb at Ludhiana Khaz.	A plastered brick building with intricate coloured decoration, supposed to have been built in the time of Alamgir by Shahab Muhammad Sharif, afterwards buried there.	Used for workshops; no information as to condition.	Good	Unnecessary.	None.	None.
Makhan Shah Dina, a Tomb 1 mile to the west of the Town of Trilash.	A plastered brick building said to have been erected in the time of Akbar.	None known of; a great of 1000 bhags of land said to have been made over by Government for the inginto 100000.	Ruins.	.....	None.	None.
JULLANDHUR DISTRICT.						
<i>In the official list some 44 buildings are described.</i>						
Masjid, Shah Darwazah, a Tomb and Mosque in Badi Shah.	A brick building built by Shah Darwazah, who came from Kabul in 1005 A.H.; a Pathan structure.	Used as a mosque; no information as to condition.	In tolerable order; but if not repaired regularly will soon give way.	.....	None.	None.
Seri, or Travellers' Rest-house at Narnahat.	A brick building celebrated for its beautifully carved gate. Nur Jahan, wife of Jahangir, built this area in 1020-30 A.H.	.....	The Principal Gateway has been repaired by Mr. Harrington, Executive Engineer.	.....	Photographic and drawings prepared in my Office—H.H.C., 8-7-52.	None.
Garden and two Tombs at Hidrawalah, close to Nakodar.	Brick buildings decorated with carvings and paintings; one of Muhammad Momin, A.D. 1612 the other of Haji Jamal, A.D. 1637.	.....	Repairs in progress under Mr. Harrington.	.....	None.	None.
Dakhul Sarai, 3 miles from Nakodar.	A building of Shah Jahan's time. The gates covered with beautiful tile work.	.....	Estimate has been prepared by Mr. Harrington, Executive Engineer, for repairs.	.....	None.	Under preparation.

KANGRA DISTRICT.

In the official list some 169 buildings are described.

Temple at Talha Bhakir Jow- als Mukhi		A very famous temple, to which numbers of pilgrims resort.	Not stated	.....	Noun	Noun.
Namaskana Temple in the vil- lage of Jadraughal, Talha, Kangra.		Very old and famous shrine	Ditto	.....	Noun	Noun.
Karla Mahadeo Temple in the village of Karla, 7 miles from Dharmada.		Temple dedicated to Shiji in the centre of a thick wood.	Ditto	.....	Noun	Noun.
Fort Kangra		An old and famous fort	.....	.....	Noun	Noun.
Hind Temple and Tanks in Kangra.		Famous for bathing and wor- ship.	Not stated	.....	Noun	Noun.
Temple at Baijnath		Very ancient building	Ditto	.....	Noun	Noun.
Bhakhandi Thaker		Temple in the village of Phadrin; very fine idol.	Ditto	.....	Noun	Noun.
Hurtumbia Dahi		Temple in the village of Gaziel; very ancient.	Ditto	.....	Noun	Noun.
Ragnathi		Temple in the village of Manry Karai; a very famous temple.	Ditto	.....	Noun	Noun.
Targat Narain		Temple in the village of Dear; very ancient.	Ditto	.....	Noun	Noun.

AMRITBAR DISTRICT.

In the official list some 10 buildings are described.

<i>Sikh Temple and sacred Tank called Darbar Sahib in the Town of Amritsar.</i>	A modern building (1763 A. D.) of marble with a copper gilt dome, sometimes called the Golden Temple; its walls are adorned with inlaid devices of flowers and flowers.	Used by the Sikh priests.	.....	Several photographs have been taken.	<i>Plains and dunes are being prepared in my office. — H. N. C., 8-7-82.</i>
<i>Sikh Temple called Akal Dargah at Amritsar.</i>	A plastered brick building, with coloured decorations and the upper story covered with copper gilt sheets; date 1738 A.D.	In religious use.	.....	Several photographs exist.	<i>Idem.</i>

Punjab—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
AMRITSAR DISTRICT—continued.						
<i>Garden and Tomb called Babul Akal in Amritsar.</i>	A brick and white stone building with coloured decorations and gilt roofs; a lofty tower is built over the tomb.	Religious institution	.....	<i>Right in repair by the Sikhs.</i>	Has been photographed.	<i>Plans and detailed drawings are being prepared in my office—H. H. C. 87-42.</i>
Hindu Temple beyond the Lohgathi Gate at Amritsar, date 1750.	A brick building situated on the Durgiana Tank, has coloured decorations.	Used by travellers.	.....	.....	None.	None.
Old Imperial Serais built on the Delhi and Lahore road by the Emperor Jahangir	Three brick buildings having coloured decorations and decorative tiles converted into villages.	Appear worthy of custody.	In ruins	Ditto.	None.	None.
LAHORE DISTRICT.						
<i>In the official list some of buildings are described.</i>						
<i>Chandwari or Gateway, 2½ miles from Lahore on the Malian road.</i>	This is a gateway leading to a garden which has been destroyed. The gate was built by Zehan Nizam, daughter of Alauddin, in 1544. It is of brick, decorated with encaustic tiles.	.....	Repairs have been executed.	.....	.....	<i>Plans and detailed drawings in my office—H. H. C. 87-42.</i>
Tomb of Ranjit Singh outside the Roshan Gateway, Lahore.	A brick and marble building (1847) with paintings and sculptures. Government bears the expenses incurred in repairs.	In custody	.....	.....	Has been photographed.	None.
<i>Mausoleum of Wazir Khan, near the Kotwali, Lahore.</i>	A handsome brick building with coloured tiles, built in the reign of Shah Jahan.	Used by Muhammadans; repairs urgent.	Bad	<i>Great damage done by the natives who use the mosque.</i>	Ditto.	<i>Detailed drawings in my office—H. H. C. 87-42.</i>
Badrshahi Masjid near the Fort at Lahore.	A handsome mosque, built by Alauddin; is partly painted and sculptured.	Used by Muhammadans.	.....	Ditto.	Ditto.	None.

Fort at Lahore	Commenced by Mahmud of Ghazni, finished by Shah Jahan in 1629; has some handsome buildings, and should be kept in a constant state of repair.	In Government custody.	Repairs about to commence.	.....	Ditto.	Plans and designs in my office—H. C., 85-82.
Tomb of Jahangir at Shahdara, 4 miles from Lahore.	A marble and granite building, with sculptures and paintings, built by Shah Jahan, this.	—	Repairs have commenced.	.....	Ditto.	Detailed drawings in my office—H. C., 85-82.
Shahinwar Gardens, 6 miles from Lahore.	Built by Shah Jahan in imitation of the great gardens in Kashmir; is kept up by Government.	In charge of the Municipality.	Repairs about to commence.	.....	Ditto.	.....
Tomb at Miran Mir, in the native village.	Built by Dara Shah in the reign of Alamgir; sculptured and highly painted.	Custody seems desirable.	.....	Information required.	None.	None.
GUJRANWALA DISTRICT.						
<i>In the official list some 15 buildings are described.</i>						
Hiran Minar, 3 miles west of Sheikhupura, Taluk Hafizabad.	A tank, summer-house and tower built in 1750 A.D. by the eldest son of Jahangir; the tank is very large, and the Baradari of good architecture.	Custody seems desirable.	.....	No information required.	Has been photographed by Major Mercer.	None.
RAWALPINDI DISTRICT.						
<i>In the official list some 8 buildings, &c., are described.</i>						
Mastheada Top	A Buddhist Tower which has been fully described by Cunningham.	worthy of custody.	In disrepair.	Should be repaired.	Has been photographed.	See Cunningham's ham.
Old Mound at Shah-d-dari.	Old Buddhist remains described by Cunningham.	In worthy of custody.	In ruins.	Ditto.	None.	Ditto.
HAZARA DISTRICT.						
<i>In the official list some 6 objects of interest are described.</i>						
Small Domed Cos Minar at Bat, 4 miles from Mangal.	Supposed to have been erected by the Emperor Jahangir on the Imperial road to Kashmir; he halted at Mangal.	Apparently none.	Falling into ruins.	.....	None known of.	Not known of.

Punjab—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
MULTAN DISTRICT.						
<i>In the official list some 13 objects of interest are described.</i>						
Shrine of Muhammad Yusuf, called Sakh Gachhi, in Multan, near the Bazar Gate.	A brick building covered with coloured encaustic tiles; 650 years old.	A place of pilgrimage; custody desirable.	.....	.....	Has been photographed.	None known of.
Hindu Temple called Narasingh Fort in Multan in the old Fort.	A brick building with paintings.	Custody desirable.	.....	.....	Idito	None.
Shrine called Harat Shakh Minar Park in Multan.	A brick building of Aurangzeb's time decorated with paintings.	Idito.	.....	.....	None.	None.
A Domed Octagonal Mausoleum, called Koka in old Fort, Multan.	A brick building of Tughlak about 250 years old, decorated with paintings.	A place of pilgrims; custody desirable.	.....	.....	Has been photographed.	None.
Shrine called Shakh Shams Tabaz, about half a mile outside the north-east corner of Multan.	A brick masonry building with paintings and bright encaustic tiles; 125 years old. Shams Tabaz was layed alive on this spot as a martyr.	A place of Muhammadan pilgrimages; custody desirable.	.....	.....	Idito	None.
Temple, Shrine and Tomb of Hazrat Ghazi, 4 miles to the south of Multan.	Of masonry, with paintings and encaustic tile-work.	A fair held twice a year, largely attended by Hindus; custody desirable.	.....	.....	None.	None.
MONTGOMERY DISTRICT.						
<i>In the official list some 4 buildings are described.</i>						
Tomb of Bawa Farid at Pakpattan, 35 miles from Montgomery.	A brick building with inland marble floor; about 650 years old; a remnant of shrine.	Visited by pilgrims; custody unknown.	Unnecessary.	.....	None.	None.

JIANG DISTRICT.

In the official return these are the only two buildings described.

Mosque at Chingxi, half a mile from Tabuli Chingxi, on the Grand Trunk Road.	Built of red and grey stone, the floor paved with mosaic of black and white marble; the tomb of white marble; there are paintings on the walls; date about 220 years old.	Held in reverence by Hindu and Muslim; a school is held in the building.	Fair	None	None.
Tomb of Hazrat Shah, half a mile from Tabuli Chingxi.	A white and black marble building; the outer walls are painted; the interior is decorated with gilding; the tomb of a Fakir, Hazrat Shah Burhan, built in Shah Jahani's time.	A fair bold yard; custody desirable.	Fair	None	None.

MUZAFFARGARH DISTRICT.

In the official list these are the only two buildings described.

Tomb of Nawab Tahar Khan at Sigpur, on the Ghemah, 60 miles from Muzaffargarh.	A brick building with encaustic tiles in green, black, yellow and blue; built in 1070 A.D. by Nawab Sultan Muhammad.	Not in use; custody desirable.	In good preservation; was repaired by the civil authorities in 1897.	Has been photographed.	None.
Tomb of Abdul Wahab at Dera. Dist. Peshawar, 43 miles north-west of Muzaffargarh.	A brick building with coloured decorations; about 252 years old.	Used for worship; custody desirable.	A rent-free holding of 21 bighas is attached to the shrine; the income is said to amount to Rs. 2,000, but is represented as being insufficient to feed the pilgrims; has lately been repaired by the police.	Ditto.	None.

DERA GHAZI KHAN DISTRICT.

In the official list some 4 buildings, &c., are described. Nothing very important.

DERA ISMAIL KHAN DISTRICT.

In the official list some 9 buildings are noticed.

Fort at Umarak near Khaypur.	Built of masonry; supposed to be very ancient; Hindu or Hindustani.	In ruins	None	None.
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Punjab—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
BANNU DISTRICT.						
<i>In the official list 2 objects of interest are noticed.</i>						
Mound at Rokeri Tahan, Mianwali.	Remains of walls in the mound were laid bare by the Indians in 1866, and several figures of Greco-Bactrian sculpture were excavated and sent to the Lahore Museum.	Custody seems desirable.	None.	None.	None.	None.
Mound at Akra.	The remains of a Greco-Bactrian city.	.....	Wants investigation.	.....	.....	.....
JHELUM DISTRICT.						
<i>In the official list some 14 buildings, &c., are described.</i>						
Temple at Malhi, 16 miles north-west of Fird Dahan Khan.	A stone building of a type similar to Kashmirian temples. An investigation would be valuable.	Custody seems desirable.	Ruins.	.....	Said to have been photographed.	None.
Fort at Rhodas, 11 miles north-west of Jhelum.	An old Muhammadan fort with a fine gateway.	Certain parts used as a cattle-depot; over the gateway is a travellers' route.	Mostly ruined.	.....	None.	None.
GUZERAT DISTRICT.						
<i>In the official list some 14 buildings, &c., are described.</i>						
Mung, 33 miles north-west of Guzerat, on the banks of the Jhelum.	A very old place; profile in Indo-Greek coins.	None.	None.	.....	None.	None.
SHAHPUK DISTRICT.						
<i>In the official list some 11 buildings, &c., are described.</i>						
Monastery at Bhara.	A plastered brick building covered with coloured decorations 300 years old.	Good; but lately been restored.	.....	.....	None.	None.

PESHAWAR DISTRICT.

In the official list some 13 objects of interest are mentioned.

<i>Fortress at Rawlani on the A11 above the village of Nawanshar, 2 miles north of the Swat police station.</i>	General Cunningham identifies it with Aornos. The fort contains a large number of Buddhist statues and sculpture.	.....	.....	.....	See Report on Emairai, Appendix I.
<i>Skidhas Garhi near Mardan.</i>	One of Asoka's edicts inscriptions, 250 B.C. General Cunningham identifies the locality as the city of Sadathia.	.....	.....	.....	None known of.
<i>Remains of Buddhist city of Takht-i-Bibi, 7 miles to the north-west of Mardan.</i>	Stone ruins of bas-reliefs and sculptures, 30 B.C. to 150 A.D.	.....	Many sculptures removed to Lahore Museum.	.....	See Cunningham and Ferguson.
<i>Remains of Buddhist city of Jamal Garhi, 7 miles to the north of Mardan.</i>	Stone bas-reliefs and sculptures.	.....	Many sculptures excavated and some taken to the Crystal Palace, and destroyed in the fire there.	.....	Ditto.
<i>Buddhist Temple and Monastery, 1 mile from the village Khadkhai in Emairai, and 1 mile from the Swat frontier.</i>	Stone ruins with bas-reliefs and sculptures.	.....	.....	.....	See Cunningham.
<i>Buddhist remains at Sanghan.</i>	Stone monasteries with sculptures	.....	About 300 sculptures were excavated the cold season of 1883-84.	.....	See Report on Emairai, Appendix I.

Reports are impracticable but the sculptures that exist should be saved for and removed.

PATIALA STATE.

Sirhind Garden and Diskari-Khas of Akbar's time.

SINDH STATE.

In the official list some 13 buildings are described.

Temple of Sri Jyoti Devi at Sind, near the Western Junction Camel. Vary ancient Hindu building Capacity seems defective. Said to be good able.

None None.

Punjab.
Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
<p style="text-align: center;">NABHA STATE. <i>In the official returns only one building noticed.</i></p>						
<p style="text-align: center;">MALER KOTLA STATE.</p>						
Mosque of Shah Fari at Maler.	About 200 years old.	Custody desirable.	Good.	.....	None.	None.
Tomb of Shah Shadr Khan at Maler.	About 500 years old.	Ditto.	Good.	.....	None.	None.
<p style="text-align: center;">KALSIA STATE. Nothing of importance.</p>						
<p style="text-align: center;">BAHAWULPUR STATE. <i>In the official list some 64 buildings are described.</i></p>						
Pattian Munakra, an old tower 7 miles north of Naulahra.	A curiously-built tower on what were the banks of the Indus; the remnant of an old town in around.	Custody, probably desirable.	Ruinous condition.	.....	None.	None.
Fort at Mow Mubarak, 6 miles west of Naulahra.	Moss-fort is one of six built by Sai Sahasi II. about 600 A.D.; was taken by Shah Haman Arghun in 1325 A.D.	Fair.	Fair.	.....	None.	None.
<p style="text-align: center;">CHAMBA STATE. <i>In the official list some 8 buildings are described.</i></p>						
Hindu Temples at Chamha on the Ravi.	Stone buildings with sculptured decorations.	Used by Hindus.	Good.	.....	Photographed.	Mentioned by Vigne. Drawings.
Temple at Mirgola in Odapuri, 3 miles from Tylbouth.	Highly ornamented with carvings in wood.	Ditto.	Good.	.....	Worthy of photography.	Worthy of drawing in detail.

Kashmir.

Some Principal Ancient and other Native Architectural Buildings in Kashmir.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
<i>In the official lists some 35 objects of interest are described.</i>						
Garden at Manas Bak, 10 miles north of Srinagar.	Laid out in Akbar's time, 200 years ago; the stone buildings are ruined.	Custody desirable.	.....	.....	Photographed.	None.
Temples at Pattan, 15 miles north-west of Srinagar.	Dated from 853 to 901 A.D.; handsome stone buildings with sculptured columns, &c. (see <i>Ancient Buildings in Kashmir</i> , H. H. Cole, 1869).	Ditto.	Ruins; preservation very desirable.	.....	Ditto.	None.
Temple at Bhaniyar, west of Baramulla, and 11 miles beyond Nishadina.	An interesting Hindu temple and enclosure of stone.	Occupied by a fakir; no regular custody; to prevent damage.	In fair order; should be preserved.	.....	Ditto.	None.
Hindu Temple on the Takht-i-Saleman Hill, called Jyeshtha.	A solid stone building, with thick walls and pyramidal roof; dated about 320 B.C.	Used for Hindu worship; custody desirable.	Ditto.	.....	Ditto.	Drawn. See <i>Ancient Buildings in Kashmir</i> , Cole, 1869.
Garden and Baradari called Chashmali Bhat, on the Dal Lake, near Srinagar.	The tank is of stone and the Baradari of wood and brick, built by Akbar.	Custody desirable.	Ditto.	.....	Ditto.	None.
Garden and Baradari at Shab-Toush Bugh on the Dal Lake, east of Srinagar.	Built by Shah Jahan, in brick and stone.	Ditto.	Fair order.	.....	Ditto.	None.
Garden called Nishat Bugh on the Dal, east of Srinagar.	Built by the father-in-law of Shah Jahan; a beautiful garden, Baradari and fountain.	Ditto.	Fair order; should be systematically preserved.	.....	Ditto.	None.
Temple at Pandrolim, 5 miles south-east of Srinagar.	Beautiful Hindu temple in stone; about 913 A.D.; stands in water.	Ditto.	Ruined; should be cleared of jungle and preserved.	It would be possible to restore this.	Ditto.	See plan in Cole's <i>Ancient Buildings in Kashmir</i> .
Mosque of Shah Hamadan in Srinagar.	An interesting wooden building.	In use by Muhammadans.	Fair.	.....	Ditto.	None; plans are wanted.

Kashmir—contd.

Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Jami Masjid in Srinagar.	A large building with wooden pillars carved.	Custody desirable.	Dilapidated.	....	Photographed.	None; details would be valuable.
Hindu Temple at Pampur.	An interesting stone building.	Ditto.	Roined.	....	Not photographed.	None.
Avantigara Temples, 13 miles north-east of Srinagar; date 775 to 904 A.D.	Old clusters and temples partly buried; the stone carvings are good; a most interesting ruin; after Martand the most important in Kashmir.	Custody wanted.	Ruin; should be well looked after.	Impossible.	Photographed.	See Cunningham and Ferguson, <i>See Cole's Architectural Buildings in Kashmir</i> .
Temple at Martand, 2 miles east of Islamabad.	The finest example of the old Kashmiri style of architecture, but in great ruin.	Custody much required.	Require attention	....	Photographed often.	See Cunningham, <i>Ferguson, Cole, Vigre.</i>
Varnag Garden and Spring.	Built by Jahangir; is a most curious place, full of sacred fish.	The Hindus take care of the place; but it wants some systematic custody to preserve it.		....	Photographed.	None.
Hindu Temples at Wangt, about 23 miles from Srinagar.	Old buildings of stone, dating from the commencement of the present century; are much out of the way.	Custody desirable.	No preservation, but should be kept clear of jungle and preserved by an enclosure.	....	Ditto.	See Cunningham and Cole.

Rajputana Agency.

Some Principal Ancient and Native Architectural Buildings in the limits of the Rajputana Agency.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Chalva Caves at Dhumnar, Kotah Agency.	About 1000-600 A.D.; a rock-cut temple.	Custody desirable.	....	....	....	See Cunningham.

Rajputana Agency—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
The Udaigiri, a lake 3 miles east of Udaipur, 34 miles by 14 miles, in Meywar.	Has a massive dam	Meywar Durbar . . . .	.....	.....	.....	.....
The Menal lake, about 50 miles north-east of Udaipur, in Meywar.	A column of Victory is said to have stood in an island on the lake.	Uda . . . .	.....	.....	.....	.....
Jahazpur Fort between Bundi and Meywar, in Meywar.	Has some interesting buildings	Ditto . . . .	.....	.....	.....	.....
Kunalgarh Fort, in Meywar	Erected by the Rana. Khumbha, has temples in it of interest	Ditto . . . .	.....	.....	.....	.....
Jain Temples in the Sadri Pass, in Meywar.	Fine buildings . . . .	.....	.....	.....	.....	See Ferguson.
Nagda Temples near Udaipur, Meywar.	Very elaborate Jaina style	Meywar Durbar	Well worthy of repair.	.....	I have photographs.	.....
<i>Taina Tower of Sri Allah at Chittore, in Meywar.</i>	About 160 feet high, and adorned with sculptures from summit to base; date about 850 A.D.	Ditto	Ruin, and being damaged by vegetation.	.....	Has been photographed.	This has been surveyed for repairs.
<i>Taina Temples on Mount Abu, Stroud Durbar</i>	Two temples; have beautiful wall carvings and details; date 1032 to 1247 A.D.	In use . . . .	.....	.....	Have been photographed.	See Ferguson. Drawing wanted; will be surveyed.
Remains of Jaina Temples at Chanderwari, a few miles south of Mount Abu.	About 1032 to 1250 A.D.; destroyed by Muhammadans in the middle of the 14th century.	Has been used as a quarry.	.....	.....	.....	See Tod's <i>Western India</i> .
<i>Mosque at Ajmer, called the Arab-din-ul-Jamga.</i>	An elaborate piece of stone sculpture; originally the building was a Hindu or Jain Temple; constructed 1211-50 A.D.	In custody . . . .	.....	Has been partially restored by the Executive Engineer, Mayo College, Ajmer.	Has been photographed.	.....
Daulat Dagh, Ajmer	Built by Jahangir	Repairs to one Pavilion in progress.	.....	.....	I have photographs.	Survey has been made.

Temples on the shores of the Lake at Pushkar.	Numberless temples and buildings on the shores of the lake, erected by Mann Singh of Jaipur, known by Mull of Bhurpur, Bijay Sing of Marwar, and Holkar's famous queen, Alchida Bai; a beautiful collection of Rajputana architectural styles.	.....	.....	.....	Photographs would be valuable.	See Roussellet, pages 217, 218. Worthy of drawing.
Tower of Victory in the Fort at Chittore, 120 feet high, in Meywar.	Erected by Khumbho Ram to commemorate his victory over Mahmud of Malwa in 1439 A.D.	.....	.....	Requires repairs.	Has been photographed.	See Ferguson. Has been surveyed for repairs.
Jain Temples, the Sangra Chao, Temple of Viro, &c.	Ruin in the Fort at Chittore.	.....	.....	Worthy of preservation.	I have photographed.	See Roussellet, pages 197 and 198. The Sangra Chao has been surveyed.
Palace of Amber, the original Capital of the Jaipur State.	Date about 1592 A.D.	.....	.....	Requires preservation.	Has been photographed.	See Roussellet, pages 235-245. Worthy of careful drawing; will be surveyed. Details would be most valuable.
Palace of the Maharaja of Jaipur at Toda Rai Sing. Temples at Toda Rai Sing, Jaipur State. Temples at Bhanganur, Jaipur State.	There are said to be fine carvings in these.	.....	.....	The Durbar is willing to see to their conservation.	.....	.....
The Mandral Fort, the Tanagarh Fort in Machlipur Taluk, Bhadrapur Fort in Cingol Taluk. Kadonvi-ka-dind in Hurri Tehsil, Karnali State.	These are reported by the Karnali Political Agent as being the principal monuments in the State.	.....	.....	The Durbar is not in a position to find funds for repairs.	.....	.....
Large Pathan Tomb at Tetlowa, 30 miles north-east of Uluwar.	Said to be the Tomb of Ala-ud-din Alam.	.....	.....	.....	.....	.....
Tomb of Nizam Bakhtawar at Uluwar.	A modern chattrin with considerable architectural pretension to beauty.	.....	.....	Requires repair.	Has been photographed.	.....

Rajputana Agency—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plan.
Fateh Jung's Tomb at Udaipur; Temples of Hanuman and Mahadev at Bhanganah, Temple of Nil Kant above the village of Tyala. Rajgarh area of this, never interesting places in the State.	Monuments reported to be of interest in Udaipur.	Udaipur Durbar.	The Durbar will arrange for their conservation.	.....	.....	.....
Temple of Keshavnath Patan on the banks of the Chaurah, Bundi State.	The present shrines were rebuilt during the reign of Maharaja Raja Chattr Sal A.D. 1637-59.	Kota and Bundi Durbars.	The fine deep carvings of the exterior have been white-washed.	.....	.....	.....
Mosque and Tomb at Bari, Dholpore State.	An object of Muhammadan veneration.	Dholpore Durbar.	The Maharaja Raj is willing to take any necessary steps for their repair.	.....	.....	.....
Mosque at Dholpore. The Tomb of Shah Saadatullah near Dholpore.	Built A.D. 1537, and is handsome. An object of veneration to the Muhammadans.					
Tomb of Mahmud Khan, one of Akbar's Generals, near Dholpore.	A handsome building.	Kota State.	A rough estimate is under preparation by the Executive Engineer, Kotah and Jodhpur Patan States for repairing the same.	.....	.....	.....
A range of Palaces used as a shooting lodge by Shahjahan near Bari, Dholpore State.	Built on the margin of a lake, 1613, to a great extent ruined.					
Ancient Temples at Bangarh, Kotah State.	The buildings are said to consist of several temples of very ancient date, principally in ruins.	Used by the Maharaja.	Being restored by the Maharaja.	.....	I have photographs.	See Romeslet's <i>India and its Native Peoples</i> , page 156.
Ancient Town and Temples at Khasa Bhas, Kotah State.	One of the Temples called Khasa Dever is worth repair.					
Ancient Palace and Pavilion at Hapur, Kotah State.	On the banks of a lake. The Bazar is said to be handsome.					
Painters in the Islands of Udaipur, Mysore.	The interiors decorated with marble and glass mosaics.					

<i>Palace at Udaipur, Meywar.</i>	A large and magnificent building; used by the Maharana of Udaipur.	In use	.....	I have photographs.	Ditto, page 160.
<i>Crustaph of Singram Singh at Udaipur, in Meywar Agency.</i>	Singram Singh was buried here in 1733; a pleasing and elegant building in stone.	Custody desirable	Will be restored by the Maharana of Udaipur.	Has been photographed.	See Ronsaint and Ferguson.
<i>Capotaola of the Maharana of Udaipur at Abaz, Udaipur.</i>	.....	.....	.....	Ditto	Ditto.
<i>Chattries of the Bhurpur Rajas at Govardhan, near Bhurpur.</i>	Very pleasing buildings of a modern type.	In custody of the Rajah's people.	.....	Have been photographed.	See <i>Buildings near Madras and Agre</i> by H. H. Cole.
<i>Palace at Dig (Dugl) in the Bhurpur Territory.</i>	A modern building (dating from 1725) of the mixed style.	Used by the Rajah; also by visitors.	Fair	Has been photographed.	See Ferguson and Cole.
<i>Temple at Mira Baie at Chittore.</i>	A temple dedicated to Vishnu	Udaipur State	.....	Ditto	See Ferguson.

Central India Agency.

Some Principal Ancient and other Native Architectural Buildings in the limits of the Central India Agency.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
<i>Buddhist Tope at Sanchi, near Bhopal.</i>	Very ancient ruins, with railing and gateways; date of tope 300 B.C.; railing 250 B.C., gates 37 A.D.	Custody most desirable.	<i>Repairs have been executed; the fallen galls have been re-erected under Major Keith.</i>	.....	Has been photographed. See <i>Free and Servant's Wreck</i> by Ferguson.	See Cunningham, Ferguson, Mason, Mailey, Cole, &c.; also Ronsaint.
<i>Toran, sculptured Gateway near the village of Gyaspore, near Bhoira, Bhopal Agency.</i>	A very handsomely carved gateway. Brahminical religious Art.	.....	.....	.....	Photograph by Mr. Beglar.	.....
<i>Remains of Jain Temple at Gyaspore, near Bhoira, in Bhopal.</i>	Beautifully carved stone columns; about 650 A.D.	Custody desirable	Ruin	.....	Have been photographed.	See Ferguson.

Central India Agency—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Names of buildings or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Remains of a group of buildings near Bilaspur, in the Bilaspur Agency.	Fragment of a Buddhist Torii railing; colossal female statue of a pillar called the Kalpa Drum, or wheel tree.	.....	Should be removed to a museum.	.....	Photographs taken by Mr. Beglar.	See Vol. X, <i>Archæological Reports</i> .
Gidayari, near Bilaspur, Bilaspur Agency.	Brahminical caves; in one a colossal sculpture of the Varaha Avatara; also a Chandra Gupta cave dating commencement of the Christian era.	.....	There is a Lion capital of one of Asoka's columns lying on the ground and should be removed to a Museum.	.....	Ditto.	Ditto.
Gadruval Temple at Pathari in the Native State of that name, Bilaspur Agency. 50 miles north-north-west of Bilaspur.	An important and interesting group of temples of the sixth to eighth centuries. With two handsome towers or gates to the enclosures of the buildings. Brahminical first, then used by Buddhists.	.....	In a ruinous condition. There are good specimens here of the Durgam Avatara sculptures.	.....	Ditto.	.....
Lal Monolith Pillar at Pathari, Bilaspur Agency.	The capital of the pillar consists of a disc fluted, with a square abacus, height 42 feet; 600 A.D.	.....	.....	.....	Ditto.	.....
Large Jain Temple, Khajuraho, Bundelkhand Agency.	A very fine pile of beautiful sculptures round tower walls, roofs and pillars most elaborate.	.....	Has been badly repaired in parts.	.....	Ditto.	See Cunningham's <i>Archæological Reports</i> , Vol. II, page 400; also Perceval's <i>Khajuraho</i> .
Temple of Vaman, Khajuraho, Bundelkhand Agency.	A portico and sanctum; roof and pillars in disrepair; handsome sculptures.	.....	Jungle and overgrowth requires removal.	.....	Ditto.	Ditto.
Temple of Chatur, 40-45, Khajuraho, Bundelkhand Agency.	On a raised terrace. Two porches in front of sanctum, over which a fine altar. The front porch has been required.	.....	.....	.....	Ditto.	Ditto.

Temple of Nandi, Khajuraho, Bundelkhand Agency.	An open pavilion on a raised plinth; balustraded seats at the sides; 20 columns; roof perfect; carvings on plinth.	.....	.....	.....	Ditto.
Temple of Chaturburi, Khajuraho, Bundelkhand Agency.	A very handsome building, 3 porticoes in front of the sanctum; roof and altar in good condition; some repairs have been done; handsome carved frieze round the plinth.	.....	.....	.....	Ditto.
Temple of Viswanath, Khajuraho, Bundelkhand Agency.	A Lingam shrine of Siva, A.D. 909. Consists of a passage to two porticoes in front of the sanctum; ultrahand roof perfect; sculptures handsome and rich.	.....	.....	.....	Ditto.
<i>Bharhut Top</i>	<i>Date of the rail 150-170 B.C.</i>	.....	.....	.....	.....
Circular Lingam temple at Chaurchob in the Son river, Rewa State, Central India.	The circular plan of the sanctum is unique.	.....	.....	.....	See Vol. VIII, <i>Archæological Reports</i> .
Temple at Udaipur, near Bham, in Bhupal.	Dating about 1060, A.D., and carved with great precision and delicacy.	.....	.....	.....	See Ferguson, page 457.
Two Jain Temples in the Fort at Gwalior called the <i>Sai Bahin</i> .	Finished about 1093 A.D.; covered with elaborate sculpture.	.....	.....	.....	See Ferguson.
Teli-As-Mandir at Gwalior.	Is in the Fort at Gwalior; a pile of ruin, dating from the 10th or 11th century.	.....	.....	.....	.....
Palace at Fortress Gwalior.	Built by Man Singh (1486-1510); a remarkable specimen of a Hindu Palace; the outer walls ornamented in parts with un-moulded brick.	.....	.....	.....	.....
Group of Hindu Temples at Paroli, 10 miles north of Meerut, Gwalior, on the road to Puss.	.....	.....	.....	.....	.....

Portions of the rail and one gate have been removed by General Cunningham, sent to the Calcutta Museum.

In comparatively good condition.

Have been cleaned and repaired.

Has been repaired and cleaned.

The palace has been opened out, cleaned and repaired.

Some sculptures removed to Gwalior by Major Keith.

Plans and drawings in my office—H. C.

Photographed by Mr. Baglar.

Have been photographed.

Has been photographed.

Has been photographed.

Central India Agency—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
<i>Temple of Mahammad Ghauri, Gwalior.</i>	Erected in Akbar's reign; has beautiful tracery of pierced stone work.	.....	Repairs required.	.....	Has been photographed.	See Fergusson.
<i>Great Mosque at Mandu, Malwa.</i>	1405-30 A. D.	Carefully desirable.	Repairs commenced by the Maharaja of Dhar.	.....	.....	Discovered in my office—H. C.
Palace at Dattish, in Bandelkhand.	A large block of buildings of a pleasing architectural character.	In use.	Information wanted.	.....	Has been photographed.	Drawings wanted.
Palace at Vitecha, in Bandelkhand.	A very picturesque combination of domes and gateways.	Ditto.	Ditto.	.....	Ditto.	Ditto.
Cronotaphs of the Scindiahs, Gwalior.	Quite modern.	In custody.	Ditto.	.....	Ditto.	.....
Temples said to be Jain, at Sanchi, near Dattish, in Bandelkhand.	Quite modern temples.	In use.	Ditto.	.....	Have been photographed.	See Fergusson, page 373.

Central Provinces. Some Principal Ancient and other Native Architectural Buildings in the Central Provinces.						
Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Remains of Hindu Temples and a fine Gateway in the Ninar District at Mandharia on the Nerbudda.	Some temples in ruins, others in ruins.	Roadways wanted.	.....	A survey of the place has been made in my office.
Ancient Temples in the Mahadeo Hills, Pachmarhi, Hoshangabad District.

In the official list there are 108 buildings, &c., mentioned.

Central Provinces—contd.
Principal Ancient and Architectural Buildings, &c.—contd

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Temples and Remains of all kinds of Buildings at Barnouli, in the Nagpur District.	.....				
A fine Temple of Mahadeva at Jangir, in the Balaghat District.	A very complete building of the fourteenth century, with minute and quaint sculptures.					
The district of Balaghat is said to contain handsome Buddhist Temples, the exact localities of many of which are not known. At Bhimlat there is a Lat lying on the ground.	.....				
Temple of Mahadeva at Pal, in the Bilaspur District.	Said to be the finest temple in the district.					
Countless number of Tanks and Temples at Ratnagpur, in the Bilaspur District.	.....				
A Temple of Burandeva, in the Bilaspur District.	Has an inscription, said to be dated 103 A.D.					
Ruins of very old and interesting Temples at Malhar, in the Bilaspur District.	.....				
Colossal Temple of Rajiva Lochan at Rajim.	An inscription is dated 759 A.D. (see <i>Asiatic Researches</i> , Vol. XV).					
Architectural remains at Bhauddak, in the Chanda District.	These are of great age and interest; among them some cave temples, &c.					
An ancient and beautiful group of Temples and Monastery at Markundi, in the Chanda District.	.....				

Famous old Temple of Ramachandra at Bhadrachalam, in the Upper Godavary District.	Supported by an annual endowment of Rs. 5,000 from the Nizam's Government.	.....	Worth preservation.	.....	Has been photographed by Mr. Beglar.	See Vol. IX, <i>Archæological Reports</i> .
Gupta Temple at Tigova, 2 miles north of Raichur, Central Provinces.	A fine example of the Gupta style of architecture.	.....	.....	.....	Photographed by Mr. Beglar.	See Vol. X, <i>Archæological Reports</i> .
Dolgaith, in the Lalpur District, Central Provinces.	Gupta Temple A. D. 600-700; excellent sculptures of a spirited kind.	.....	Well worth preserving.	.....	.....	.....

Haiderabad.

Some Principal Ancient and other Native Architectural Buildings in the Nizam's Territory, Haiderabad.

Names of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Dravidian Temple, the Kalas at Ellora.	One of the most singular and interesting architectural monuments in India, cut in the rock; date 750-950 A.D.	Requires guarding.	Has been damaged by Muhammadans.	.....	.....	See Daniel's <i>View of Hindustan</i> .
Caves at Ellora, Aurangabad District.	500-800 A.D.	Custody desirable.	.....	.....	.....	See Ferguson and Daniell.
Chaitya Caves at Ellora, Aurangabad District.	Rock-cut temple; about 600 A.D.	Ditto.	.....	.....	Has been photographed.	See Ferguson.
Chaitya Caves at Ajanta.	Rock-cut temple with coloured frescoes and handsome sculptures.	<i>Doors have been fitted to the caves by the Nizam's Government.</i>	.....	.....	Have been photographed.	See Gill, Ferguson, Burgess, and Gerfilla. Some of the paintings have been copied.
Jaina Temple at Amwari, near Ajanta.	Beautiful carved stone pillars.	None.	Ruin.	.....	Photographed by Major Gill.	.....
Chaityayan Temple at Badkheri.	A temple near Haiderabad, called by Ferguson, the most simple form of a Chaityayan temple.	Custody desirable.	Ruin.	.....	Has been photographed.	.....

Jain Statue at Sravasti, Belgaul, near Seringapatam.	This statue is 70 feet high. Wellington went to see it at the time of the Siege of Seringapatam, 1799.	Ditto	Information wanted.	.....	.....	.....
Jaina Deities at Sravasti, Belgaul, near Seringapatam.	There are 15 of these temples, which are more or less of ornamental character. Built by Visakhaditya Ballala in 1003 A.D.; very elaborate shrines with carvings in stone.	Nine known; well worth looking after. Said to be in charge of the Assistant Commissioner, Mysore, Madras District.	Information wanted.	.....	.....	None.
Temple at Somnathpur			<i>Walls repaired and put in order by Colonel Sain-ky in 1876.</i>	.....	.....	See Fergusson.
Great Temple at Hallsid, commenced about 1224 A.D.	A double Chalukyan temple of great beauty and elaboration.	Said to be in charge of Amildar of Belur.	.....	.....	.....	Ditto.
Temple at Belur near Hallsid.	A Chalukyan temple, with wonderfully elaborate sculptures built in 1114 A.D.	Ditto	.....	.....	.....	Ditto
Chalukyan Temple, called Kailash, at Hallsid, erected in the 11th century.	Covered with sculptures of the best class of Indian art.	Ditto	.....	.....	.....	.....
Colossal Jain Statue at Karkali.	This image is 41 feet 3 inches high, date 1312 A.D.	No information	.....	.....	.....	.....

Burma.

Some Principal Ancient and other Native Architectural Buildings in Burma.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Pagoda at Thaton, about 40 miles north of Martaban.	The ruins at Thaton have been described by Sir Andrew Scott, and are very extensive. The principal pagoda is adorned with the most elaborate sculptures; date probably before sixth century.		No official list yet furnished. [See Fergusson's <i>Indian Architecture</i> .]			

Burma—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Ruins and Remains at Prome.	Prome was the religious capital of the Buddhists in Burma up to 107 A.D., and its ruins require investigation.	.....	.....	.....	.....	.....
Shwe-Takay-Dag is the large Pagoda in the Town of Prome.	The original pagoda is said by tradition to date from Buddha. It was last repaired in 1828.	In use	.....	.....	Has been photographed.	.....
Kyaik-Than-Lan Pagoda, Moulmein.	The principal pagoda in Moulmein founded in 978 A.D.	In use	Was repaired in 1841.	.....	Ditto	.....
Ruins of Pagan.	These are very extensive, and Colonel Vele estimates that the remains of 800 to 1,000 temples may be traced. The temple of Gaudapala, 1160 A.D., is such and beautiful in detail the buildings are always of brick covered with stucco.	.....	.....	.....	.....	.....
Circular Dagobas.	The Kongsuado Dagoba is not far from Mergui, and dates from 1650 A.D.; in form it resembles the Sanchi type, having precisely the same features, made however of brick and plaster instead of stone, and elaborate gateways; the Shweuado Dagoba at Pegu is more polygonal than circular, and is as high as St. Paul's.	.....	.....	.....	.....	See Colonel Yule's Mission to Arak.
Burmese Mosques.	Are all of wood, and most of them many storied, like the temples in Nepal (see Ferguson, 300).	.....	.....	.....	.....	See Colonel Symes' Embassy to Amoy.

Nipal.

Some Ancient Buildings in Nipal.

Name of building or group of buildings.	General character.	Contody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Buddhist Temple at Swayambhunath, near Klumandiu.	Curious pile of building; the Chailya is of an irregular form, with a very exaggerated form of "tee."	Used for worship	.....	.....	.....	See drawings in the Hodgkin Collection.
Hindu Temples to Mahadeo and Krishna at Patan.	Curious buildings; worthy of preservation.	.....	.....	.....	Have been photographed.	Ditto.
Hindu Illowani Temple at Bhaktgan.	It is five stories in height, and very Chinese in character.	.....	.....	.....	Ditto	Ditto.

Assam.

Ancient Buildings in Assam.

Name of building or group of buildings.	General character.	Contody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Temples at Sibsegur, Jaisaige and Gaurisagar, in the Sibsegur District.	Reported to be works of art.	.....	.....	.....	.....	.....
Temple on the Bahmani Purbat, in the Darrang District.	The ruin is said to be of large size and carved stones lying about.	.....	.....	.....	.....	A plan has been made by the Road Overseer at Darrang.
Remains of Dimaapur, the capital of the Kachari Kings of Upper Assam in the Naga Hills.	Some remarkable pillars are described as being in the Fort.	.....	.....	.....	.....	.....
A collection of carved stone and stones at the Kachari Temples, Darrang District.	The carvings are said to have an ancient appearance.	.....	.....	.....	.....	.....

Madras Presidency. **Some Principal Ancient and other Native Architectural Buildings in the Madras Presidency.**

Names of buildings or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
<i>Buddhist Temples at Amaravati, in the Krishna District.</i>	<p style="text-align: center;"><i>Some 62 remains are noted in an official list furnished in 1870. Remains of a Dacheia and stupa, cuttings desirable. Some repairs have been recommended.</i></p>					
<i>The seven Pagodas at Mahabalipuram near Madras, in Chingleput.</i>	Temples of Dravidian architecture; about the 6th century; cut in the rock.	Custody desirable. (Permanent watch or suggested in 1870.)	<i>Preservation has been commenced; a good deal remains to be done.</i>	.....	See Tree and Serpent Wars ship, by Ferguson.	See Tree and Serpent Wars ship, by Ferguson.
Dravidian Temple at Tiruvallur, in Chingleput, 30 miles west of Madras.	A number of temples and shrines enclosed in a court 400 feet by 700 feet.	.....	.....	.....	Photographed by Dr. Hunter, Captain Lyon.	See Ferguson, Colonel MacKenzie.
Dravidian Temple at Conjevaram in Chingleput.	Groups of temples as picturesque and good as any elsewhere in the Madras Presidency.	.....	.....	.....	.....	See Ferguson, and Ram Rao's <i>Hindu Architecture</i> .
Temple at Perur in Coimbatore.	Has a fine porch, date about 1750 A.D., with handsome compound pillars.	.....	.....	.....	Has been photographed.	See Ferguson.
Two Gopurams of a deserted Temple at Turpatty, on the banks of the River Pennar, District Bellary.	Covered with the most elaborate sculptures.	.....	.....	.....	Have been photographed.	See Ferguson. Details would be valuable.
Temple of Vitthala at Vijayanagar on the Tungabhadra, Bellary District.	A remarkable ruin of the Dravidian style erected 1519-42 A.D.; carved in granite.	.....	<i>Mr. Black, Assistant Engineer, has been at work here during the cold season of 1883.</i>	.....	Has been photographed.	Details would be valuable.
Temple at Vallara, North Arcot.	A fine porch; date about 1550 A.D.; the Vallara Fort was occupied as a store.	.....	<i>Has been restored and cleared.</i>	.....	.....	See Ferguson.
Rajah Mahal, or Rajah's Palace at Chendragiri, in North Arcot.	Chendragiri is a deserted fortified city; there are several interesting ruins in the fort; among them the Rajah's palace.	.....	In 1877 the sum of Rs. 3,000 was provided for repairs.	.....	Name known.	Name known.

Delli Darwaza at Arore	Is a spacious and massive gateway surmounted by a room; said to have been used by Clive at the time of the capture of Arore.	.....	In 1877 a small estimate was framed for its repair.	.....	.....
Temple at Chellambaram, in South Arcot.	A large enclosure of shrines and temples, dating from 10th to the 17th centuries.	.....	Preservation desirable.	.....	See Ferguson. Details would be valuable.
Dravidian Pagoda at Tanjore.	Called the Great Pagoda; date about the 12th century.	.....	In charge of the Princess of Tanjore.	.....	Ditto.
Dravidian Temple of Soorambanaya, Tanjore.	Date about 13th century; covered with elaborate sculptures.	.....	Ditto.	.....	Details would be valuable.
Caputem or Porch at Conharat, in the Tanjore District.	A richly ornamented place of Dravidian architecture.	.....	.....	.....	Details wanted.
Dravidian Temple at Srirangam, near Trichinopoly.	A very large enclosure of temples; a modern cluster of buildings built within the limits of the 18th century.	.....	<i>Projects for repairs in hand.</i>	.....	.....
Great Temple at Madurai.	In use.	.....	Ditto.	.....	Drawings have been prepared in my Office.—H. H. C. 8-7-80.
Trimal Nayanar's Palace at Madurai.	Dating from 1623-45 A.D.	.....	<i>Repairs in progress since 1886. The Palace is being converted into district offices.</i>	.....	See Ferguson. Details wanted. Mr. Chelidam at Madurai has drawings.
Dravidian Temple of Rameswaram, in the Island of Pambour in Madurai.	Has some beautiful corridors about 1550 A.D.	.....	Has been much disfigured by readings of paint. <i>Project for repairs in hand.</i>	.....	Drawings in my Office.—H. H. C. 8-7-80.
Pagoda at Samgali, in the Cuddalore District.	A small ruined pagoda with some fine stone carvings and fresco paintings.	.....	.....	.....	.....
Temple at Tinarevelly	An enclosure 208 feet by 756 feet.	.....	Preservation desirable.	.....	See Ferguson.

Bombay Presidency. **Some Principal Ancient and other Native Architectural Buildings in the Bombay Presidency.**

Name of building or group of buildings.	General character.	Condition.	Preservation.	Restoration.	Photographs.	Drawings or plans.
<i>In an official list furnished by Mr. Burgess in 1875 some 750 places of interest are enumerated.</i>						
Portuguese remains at Havelock, Mandaprahar, Ghodabar in the Thana district.	These are mostly churches and monastic buildings.	.....	Some remains have been suggested for Havelock.	.....	.....	Photographs have been taken of Havelock.
Buddhist relic found at Sopara, Thana district.	Several valuable Buddhist relics were found here in 1892.	.....	Should be raised in	.....	.....	.....
Cave at Elephanta, Bombay.	Dates from the middle of the eighth century; curious Hindu sculptures.	In charge of Executive Engineer, Bombay Deccan.	Stone work has been recently cleaned.	.....	Has been photographed.	See Burgess.
Chaitya at Kenheri on the Island of Salsette, Bombay.	A rock-cut Buddhist temple; about 600 A.D.	Carefully desirable	Fair	.....	.....	.....
Chaitya Cave at Nasik, Bombay.	A rock-cut Buddhist temple; about 175 B.C., with sculpture and capitals.	Ditto	Fair	.....	Has been photographed.	See Ferguson.
Temple called Ambarnath, near Kulkarni, Bombay.	Dating about 800 A.D.; casts of the sculptures have been made and sent home, though small, it is richly carved.	Carefully desirable. Repairs in progress.	.....	.....	.....	See Daniell. Drawings would be valuable.
Solar Temple at Poona, Bombay.	A Hindu rock-cut temple of plain design.	.....	.....	.....	.....	See Daniell.
Chaitya Cave at Karli in the Bhore Ghat.	A handsomely rock-cut temple; 35 B.C.	Repairs in hand	.....	.....	Has been photographed.	See Ferguson.
Chaitya Cave at Bedda, 11 miles from Karli, in the Bhore Ghat.	A rock-cut temple with sculptured capitals.	In charge of Executive Engineer, Poona District.	.....	.....	Ditto	See Burgess and Ferguson.
Chaitya Cave at Bhaja, in the Bhore Ghat.	A cave temple dating before the Christian era; carved out of the rock; no sculpture.	Carefully desirable	.....	.....	Ditto	Ditto.

Name of Building, in the Kulu District, or elsewhere.	Date.	Remarks.	Condition.	Notes.
Tomb of Ibrahim at Bijapur, in the Kulu District, or elsewhere.	1537-39 A.D.	The town is in process of being enlarged in the neighbourhood of the quarters of the Kulu District.	Repairs necessary.	See Ferguson and A. Cunningham; also Hope's description of Bijapur.
Tomb of Ibrahim at Bijapur, in the Kulu District, or elsewhere.	1537-39 A.D.	The town is in process of being enlarged in the neighbourhood of the quarters of the Kulu District.	Repairs necessary.	See Ferguson and A. Cunningham; also Hope's description of Bijapur.
Tomb of Ibrahim at Bijapur, in the Kulu District, or elsewhere.	1537-39 A.D.	The town is in process of being enlarged in the neighbourhood of the quarters of the Kulu District.	Repairs necessary.	See Ferguson and A. Cunningham; also Hope's description of Bijapur.
Tomb of Ibrahim at Bijapur, in the Kulu District, or elsewhere.	1537-39 A.D.	The town is in process of being enlarged in the neighbourhood of the quarters of the Kulu District.	Repairs necessary.	See Ferguson and A. Cunningham; also Hope's description of Bijapur.
Tomb of Ibrahim at Bijapur, in the Kulu District, or elsewhere.	1537-39 A.D.	The town is in process of being enlarged in the neighbourhood of the quarters of the Kulu District.	Repairs necessary.	See Ferguson and A. Cunningham; also Hope's description of Bijapur.
Tomb of Ibrahim at Bijapur, in the Kulu District, or elsewhere.	1537-39 A.D.	The town is in process of being enlarged in the neighbourhood of the quarters of the Kulu District.	Repairs necessary.	See Ferguson and A. Cunningham; also Hope's description of Bijapur.
Tomb of Ibrahim at Bijapur, in the Kulu District, or elsewhere.	1537-39 A.D.	The town is in process of being enlarged in the neighbourhood of the quarters of the Kulu District.	Repairs necessary.	See Ferguson and A. Cunningham; also Hope's description of Bijapur.
Tomb of Ibrahim at Bijapur, in the Kulu District, or elsewhere.	1537-39 A.D.	The town is in process of being enlarged in the neighbourhood of the quarters of the Kulu District.	Repairs necessary.	See Ferguson and A. Cunningham; also Hope's description of Bijapur.
Tomb of Ibrahim at Bijapur, in the Kulu District, or elsewhere.	1537-39 A.D.	The town is in process of being enlarged in the neighbourhood of the quarters of the Kulu District.	Repairs necessary.	See Ferguson and A. Cunningham; also Hope's description of Bijapur.
Tomb of Ibrahim at Bijapur, in the Kulu District, or elsewhere.	1537-39 A.D.	The town is in process of being enlarged in the neighbourhood of the quarters of the Kulu District.	Repairs necessary.	See Ferguson and A. Cunningham; also Hope's description of Bijapur.
Tomb of Ibrahim at Bijapur, in the Kulu District, or elsewhere.	1537-39 A.D.	The town is in process of being enlarged in the neighbourhood of the quarters of the Kulu District.	Repairs necessary.	See Ferguson and A. Cunningham; also Hope's description of Bijapur.
Tomb of Ibrahim at Bijapur, in the Kulu District, or elsewhere.	1537-39 A.D.	The town is in process of being enlarged in the neighbourhood of the quarters of the Kulu District.	Repairs necessary.	See Ferguson and A. Cunningham; also Hope's description of Bijapur.

Bombay Presidency—contd.
Principal Ancient and Architectural Buildings, Sec.—contd.

Name of building or group of buildings.	General character.	Clasdy.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Jaina Stambha or Pillar at Gwadarberry in Kanara.	A handsome carved stone pillar.	.....	Apparently fair.	.....	Has been photographed.	.....
Jaina Temples at Girnar, near Puttan Sonawath, Kathiawar.	Amongst these is the famous Sonawath temple.	.....	.....	.....	.....	See Burgess.
Jain Temples at the sacred city of Sotseriya, near Pattan in Kathiawar.	Numbers of temples and shrines, some as early as the eleventh century and as late as the present century.	A few priests sleep in the temples and keep the place clean.	.....	.....	None.	Ditto.
Naulakha Temple at Gumbh, Kathiawar.	Very elaborate Jain temple.	.....	Rained.	.....	.....	See Burgess.
Jami Masjid at Champaur in Guzerat.	Built by Muhammad Shah in 149 A.D.; said to be very tasteful decoration.	Is not used.	Has been injured in many places.	.....	None.	None.
Tomb of the Nawab of Junaghar in Kathiawar.	A modern building.	.....	.....	.....	Has been photographed.	.....
Jami Masjid at Broach.	Probably built before A.D. 1000; built of stone with domes, and is a fine specimen of an early mosque, constructed out of the materials of overthrown Hindu temples.	Used as a travellers' quarter by Mohamadan inhabitants.	Is falling into a dilapidated condition. Repairs wanted.	.....	None.	See Mr. Hooper's book on <i>Sarat & Broach</i> .
Old Temple at Gop-Kathiawar.	Singular in style.	.....	Rained.	.....	.....	See Burgess.
Brahminical Temple of Papannath at Porabhal or Pattadakal, in Dhawar, Bombay.	Date about 900 A.D.; a much sculptured stone building.	None known.	A ruin.	.....	Has been photographed.	See Burgess.
Dravidian Temple at Pattadakal, in Dhawar, Bombay.	Date eighth or ninth century; a rock-cut temple.	Requires custody badly.	Requires preservation.	.....	.....	See Ferguson and Burgess.
Brahminical rock-cut Temples at Badami, in Dhawar, Bombay.	There are three caves, interesting for their architectural details and sculptures; 375-700 A.D.	.....	.....	.....	Have been photographed.	See Burgess.

Despiau or Stone Lamp Post at Dharwar, Bombay.	An elegant stone column.	.....	.....	.....	Has been photographed.	.....
Palace at Jamnagar, Kathiawar.	Elaborate.	.....	.....	.....	.....	See Burgess.
Jain Chattri at Mandas, Kach.	.....	.....	.....	.....	.....	See Burgess.
Jain Temple at Badamwar, Kach.	.....	.....	.....	.....	.....	See Burgess.
Tomb near the Mosque of Mirza Shamsi at Serai.	In the style of the later Muhammadin tombs at Ahmedabad; windows of perforated stone and the domed interior of rare beauty.	.....	Is in a dilapidated and filthy state.	.....	None.	None.
Jain Temple at Kedar, near Bhuj, Kach.	.....	.....	Custody desirable.	.....	.....	See Burgess.
Mosque at Dabhoi in the Rajnagar Zilla.	Worthy of repair and preservation.	.....	In charge of Executive Engineer, Rajnagar.	.....	.....	.....
The Munabi' Mosque at Rajnagar, Serai.	Apparently a small Jain temple converted into a mosque; curious for its carved wooden pillars.	.....	No information.	.....	None.	None.
Buddhist Caves Temples at Katurb, 30 miles south of Salar.	No information.	.....	.....	.....	.....	.....
Jami Masjid at Karaz.	Built 1569 A.D.; both minarets and mihrabs are decorated with carvings covered with plaster.	.....	No information.	.....	None.	None.
Mosque and Tomb of Tatta in Sind (during A. D. 1572-1584), Bombay.	The tomb of Nawab Amir Khan, 1647; is of brick, ornamented with beautiful coloured tiles.	.....	In custody of the Muhammadans at Tatta.	.....	Has been photographed.	Details would be valuable.
Ancient Gateways at Dharoi, Baroda.	Beautiful specimen of Jain Architecture of the 12th century.	.....	Much ruined.	.....	.....	.....
Lal Shah Baza, a Masjid in the south-east quarter of Sehwan in the Karachi District.	Built of fine red brick; profusely decorated with coloured tiles; built about 1540 A.D.	.....	Occupied by Sayyids, and considered very sacred.	.....	None.	None.
Kwaja Niaz Jod Pir at Bohri on an island opposite Sakhar.	Dated 952 A.D.; covered with tiles of all colours and patterns.	.....	No custody; a guard much neglected.	.....	None.	None.

Appendix B.

List of some Historical British Monuments and Memorials worthy of preservation on account of their public interest.

(Revised.)

Bengal.

1. The Ochterlony Monument on the Calcutta maidan; built in 1825 in honour of Sir David Ochterlony. The column is of plastered brick.
2. Pedestrian statue of Lord William Cavendish Bentinck, Governor General; erected in 1835 in front of the Calcutta Town Hall; bronze.
3. Pedestrian statue of George, Earl of Auckland, Governor General; erected in 1848; inside the Eden Gardens, Calcutta; bronze.
4. Pedestrian statue of Sir William Peel, Calcutta; white marble.
5. Equestrian statue of Henry, Viscount Hardinge, on the Calcutta maidan; bronze.
6. Equestrian statue of Sir James Outram (by Foley, 1874), Calcutta; bronze.
7. Statue of the Marquess of Hastings (in the Dalhousie Institute), Calcutta.
8. Statue of Lord Lawrence, Calcutta.
9. Statue of Lord Mayo, Calcutta.
10. Pedestrian statue of Thomas George, Earl of Northbrook, by Bodin, in front of High Court, Calcutta; erected 1878; bronze.
11. Lady Canning's tomb in St. Paul's Cathedral, Calcutta.
12. Statue of Bishop Heber, by Chantry, in St. Paul's Cathedral, Calcutta.
13. Monument to Earl Elgin in St. Paul's Cathedral, Calcutta, by Gilbert Scott.
14. Pedestrian statue of the Marquess of Wellesley in Government House, Calcutta, by Bacon; marble.
15. Equestrian statue of Charles John, Earl Canning, by Foley; erected 1877 on the Calcutta maidan; bronze.
16. Pedestrian statue of Warren Hastings, by Westmacott, in the Calcutta Town Hall; white marble.
17. Equestrian statue of Lord Napier, facing Prinsep's Ghât, Calcutta.
18. Lady Canning's tomb in Barrackpore Park.
19. Cenotaph in Barrackpore Park, erected by the Earl Minto, containing the following mural tablets:—to the memory of officers who fell at the conquest of Java, 1810-12; also to the memory of officers who fell at the conquest of the Isle of France, 1810; and to the memory of the officers who fell at Maharajpore, 1843.
20. Cenotaph close to the Judge's kutcherry at Bankipore, erected in memory of Major Knox, who in 1760 relieved Patna when besieged by the Emperor Shah Alum.
21. Tall stone shaft in Patna City, erected in memory of 48 servants of the East India Company and 100 European soldiers massacred by Mir Kassim Ali, Subadar of Bengal, when the British were marching to the rescue of their countrymen in Patna in 1763. Among the victims were Mr. Ellis (Resident of Patna) and Messrs. Hay and Lushington (Members of Council).
22. Two monuments at Bhagalpur to the memory of Mr. Augustus Cleveland, Collector of Bhagalpur; one of brick, erected by the district landholders, and the second of stone, sent out by the Court of Directors from England.

Bengal—*contd.*

23. A small cross in the disused burial-ground enclosed in the Bhagalpur racecourse, erected to the memory of officers and men of Her Majesty's 3rd Buffs, interred in 1828.
24. Monument at Chattrā to commemorate some soldiers who fell in combat with mutineers, 1857 (Hazaribagh District).
25. A tomb at Arrah to the memory of soldiers of Her Majesty's 35th Regiment who fell in the Shahabad District on the 23rd April 1858.
26. Three monuments on the west and three monuments on the north side of Khūrdah to the memory of officers and men who fell during the Khūrdah rebellion (Puri District, Orissa).
27. Tomb of Mrs. Mary Hastings (wife of Warren Hastings) and her child in the old cemetery of Cossim Bazar (Murshidabad District).

North-Western Provinces.

28. Monument at Aligarh to the memory of officers and men who fell at the taking of Aligarh in 1803.
29. Tomb at Aligarh of Major Robert Nairn, 6th Bengal Cavalry, who fell at the siege of Kutchowra in 1803.
30. Monument at Aligarh to the memory of officers and men who fell during the Mutiny, 1857.
31. Tomb of General Gillespie at Dehra Dun.
32. Two memorial pillars erected to the memory of the officers who fell at the storming of the Kalinga Fort in 1814, Dehra Dun.
33. Monument at Fatehgunj near Bareilly to the memory of the officers and men who fell near Fatehgunj against the Rohillas in 1794.
34. Tomb of the late Mr. Thomason, Lieutenant-Governor, North-Western Provinces, in the Churchyard of Christ Church, Bareilly.
35. Four masonry Lions on the Ganges Canal at Saharunpur.
36. Tomb of General Fraser in the Muttra cemetery.
37. Tomb of Lieutenant Berlton near the site of the old cemetery at Bulandshahr.
38. Tomb of Lieutenant Home in the Bulandshahr cemetery.
39. The memorial cross in memory of those who were murdered in the Mutiny at Shahjahanpur.
40. Tomb over the graves of Captain A. Giffard and Volunteer Trooper A. Curran in the village of Mainamaha, at Basti.
41. Tomb of Mr. E. F. Venables in the old cemetery at Azimgarh.
42. Tomb of Captain H. H. Jones in the Public Gardens at Azimgarh.
43. A monument at Hallia in Tappa Uprandh in memory of those who fell in the battle of Bebarrah Churri, A.D. 1811, Mirzapur District.
44. Two graves of Indigo planters, close to Gopiganj on the grand trunk road, Mirzapur District.
45. Tomb erected to the memory of some British officers killed during the Mutiny at Fatehpur.
46. Tomb to the memory of Colonel Thomas Sydney Powell, Colonel of the 53rd Regiment, at Fatehpur.
47. Monument erected to the memory of the officers and men of General Whitlock's force who fell during the Mutiny, at Banda.
48. A memorial stone in the Alfred Park to the memory of Quarter Master Sergeant R. Watkins, murdered by the mutineers, Allahabad.
49. A stone in the Kydganj cemetery, beneath which were laid the remains of 7 officers of the 6th Native Infantry who were murdered during the Mutiny, Allahabad.

North-Western Provinces—*contd.*

50. A monument in memory of Major Penkney, late Commissioner of Jhansi.
51. Tomb of Lieutenant-Governor the Honourable John Russell Colvin at the Palace of Agra.
52. At Goverdhuu a massive monolith bearing an inscription setting forth that Colonel Seymour, C.B., will punish any soldier who shoots game in the neighbourhood.
53. Monument at Aligarh to the memory of Ensign Marsh and others killed on the Agra and Aligarh road in 1857.
54. Tombs at Shewalaghat, Benares, of 3 British officers who were killed in the disturbance of Rajah Cheyt Singh.
55. Memorial cross at Fatehgarh in memory of those who fell during the Mutiny, 1857.
56. Tomb in Cawnpore Memorial Church compound erected to the memory of Major Vibart and 70 officers and men who escaped from the massacre at Cawnpore in June 1857 and were captured and murdered at Sheorajpdr.
57. Tomb near the Cawnpore Church erected by the Memorial Church Committee over the remains of those that were first killed in the entrenchment in June 1857.
58. Well in the Memorial Church compound covered with a stone and inscription.
59. Large stone cross at the barracks, Cawnpore, erected over the well in which those that lost their lives in the entrenchment were buried in 1857.
60. Statue (by Marochetti) and enclosure over the well in the Memorial Gardens, Cawnpore.
61. Memorial at Azamgarh erected to the memory of the officers and men who were killed at the battle of Azamgarh.
62. Mausoleum of Lord Cornwallis at Ghazipur by Flaxman.
63. Monuments at Jhansi in memory of those killed in the Mutiny, 1857.

Oudh.

64. The space in front of the Tarawali Kothi, where two parties of Europeans were murdered in 1857; a memorial has been put up to commemorate these massacres, almost on the spot where they occurred.
65. On left of "Gūsainganj" Road, about $\frac{1}{2}$ mile from "Dilkāsha," and on this side of bridge, over "Pangri" Nullah—Lieutenant Percy C. Smith, 97th Regiment.
66. About fifty yards on left flank of "Dilkāsha" in an enclosure, Major the Honourable Barrington R. Pellew and Ensign L. E. Cooper, 2nd Battalion, Rifle Brigade.
67. In rear of the General's house, Captain Charles William McDonald, 93rd Highlanders; Lieutenant Lowick Emilius Cooper, 2nd Battalion, Rifle Brigade; Lieutenant Charles Warden Sergison, 93rd Highlanders; and Charles Evans, 93rd Band.
68. In the "Belatibagh," Captain H. Hutchinson, 9th Royal Lancers; Sergeant S. Newman, 9th Royal Lancers; and Mr. Henry B. Garvey, Acting Mate, Her Majesty's S.S. *Shannon*.
69. In rear of the right flank of "La Martinière"—Captain W. S. R. Hodson, of Hodson's Horse; Captain L. D'Acosta, 56th Native Infantry.

Oudh—*contd.*

70. Under a tree on the left of the road going from "La Martinière" to "Wingfield Park Bridge"—Lieutenant Augustus Otway Mayne, Bengal Artillery.
71. About fifty yards on the left of "Secundrabagh"—Lieutenant Francis Dobbs, and 5 privates of 1st Madras Fusiliers.
72. Off the road between "Mushidzadi's Tomb" and the Kaiserbagh—Captain T. Clarke, R.E., Lieutenant E. P. Brownlow, R.E., Corporal F. Morgan, Lance-Corporal J. Davies, and 12 Sappers.
73. At "Secundrabagh" Bridge on the left bank of "Gumti"—Lieutenant W. R. Moorsom, 52nd Light Infantry, Deputy Assistant Quarter Master General, 1st Division.
74. About $2\frac{1}{2}$ miles on and close to the left of "Fyzabad" road—Captain W. F. Thynne, 2nd Battalion, Rifle Brigade.
75. About 150 yards off the right of the "Fyzabad" road, at 50 yards beyond the bridge over the "Gokral" Nullah—Charles Sandford, late Captain of the 3rd Bengal Light Cavalry.
76. Old cantonment cemetery, 3 miles on the "Sitapur" road to the right—Lieutenant F. G. MacDonald, Adjutant, 2nd Punjab Cavalry; Lieutenant H. G. Richards, 3rd Battalion, Rifle Brigade; and Lieutenant Robert Daily Syngé, 90th Light Infantry.
77. About 50 yards to the right of the "Sitapur" road at the 4th milestone, the 46th Regiment, Cholera Graveyard—Private W. Aston, 46th Regiment.
78. At the "Músabagh"—Captain T. Wale, 1st Sikh Irregular Cavalry.
79. About $\frac{1}{2}$ mile off the "Malliabad" road between it and "Músabagh"—Major John Griffiths Price, 2nd Dragoon Guards (Queen's Bays).
80. The 97th Regiment Graveyard on the river road, 1 mile from the Fort, Ramaki Darwaza—Sergeant W. Smith and Sergeant G. Smith, 97th Regiment; Assistant Surgeon W. Dumbreck, 97th Regiment.
81. Steeple monument on the top of "Hazratganj" near "Kaiserbagh"—Sir Mountstuart Jackson, Bart., Captain Patrick Orr, Lieutenant G. J. H. Burns, 1st Bombay European Fusiliers, Sergeant-Major Morton; on other side G. P. Carew, Esq., Mr. Greene, Miss Jackson, and others, victims of 1857.
82. In the "Alambagh"—Major T. Perrin, Lieutenant N. G. J. J. Nunn, and M. Preston, 90th Light Infantry; Lieutenant Dundas W. Gordon, Bengal Artillery; Henry Ayton, 84th Regiment; Major-General Sir H. Havelock.
83. Tomb about $3\frac{1}{2}$ miles off the left side of the "Sitapur" road between the 7th and 8th milestones.
84. Old "Murriaon" Cemetery and Roman Catholic Cemetery in rear of the "Passunt" (Revenue or Customs) "Kaiserbagh."
85. Two tomb-looking enclosures—one close to the right side of the "Sitapur" road, about the 8th milestone, nearly opposite the Travellers' Bungalow; the other on the Artillery side of the road, running between their lines and the Lancers.
86. Lawrence's tomb—Residency.
87. Cross to those who fell in the defence—Residency.
88. Memorial to the faithful sepoy of the Bailey Guard, outside the Bailey Guard.
89. The "Sher Darwaza," where Neill fell.

Oudh—*contd.*

90. Tomb of Mr. Ravenscroft, murdered at Bhinga, Oudh, 1823.
91. Tomb of the Honourable Adrian Hope, C.B., Lieutenant-Colonel, 93 Highlanders, Hardoi.
92. Graves of Lieutenants C. Douglas, A. Jennings Bramley, and H. Willoughby at Hardoi.
93. An enclosure at Kusaura containing the graves of two children of W. G. Probyn, C.B., Hardoi District.
94. Grave of Major Robertson at Baraman, Hardoi District.
95. A monument erected in memory of certain victims of the rebellion of 1857 at Kheri.

Punjab.

96. Mackeson's Obelisk—Peshawar.
97. Bilaspore monument four or five hundred yards to the East of Rotten Ghar, to Captain Showers, 1-10th Bengal Native Infantry, killed storming the Malown Heights, 15th April 1815.
98. Also to Lieutenant Lawtis, R.E., rude tomb of stones; a monument was erected to him in the Cathedral Church of Calcutta.
99. Lieutenant Thackeray, 26th Native Infantry, killed at the siege of Jeytuk; his tomb on the bank of a tank at Nahun. This monument is a lofty pyramid on a pedestal without any inscription; there are three other graves.
100. Masonry pyramid and inscription to the memory of Colonel Canara, who fell in 1848 while defending his guns against the rebel Sikh army at Haripur.
101. Cemetery at Gujrat in which officers and men killed in that battle are interred.
102. Grave of Lieutenant Boulnois, Bengal Engineers, in a bastion of Fort Michni, assassinated by Mohammeds in 1852.
103. Cross in memory of Sir Donald McLeod at Lahore.
104. In front of the Delhi Church is a massive marble cross, sacred to the memory of those who were massacred in May 1857.
105. The Delhi magazine rendered famous by the intrepid Willoughby.
106. John Nicholson's grave in the cemetery, Delhi, facing the Kashmir Gate.
107. Flag-Staff Tower, Delhi.
108. The monument on the Ridge, Delhi.
109. Monument and fountain in memory of General John Nicholson, who fell at Delhi, 1857, at Margulla, between Rawalpindi and Attock.
110. Memorial monument of the siege of Delhi, 1857; Delhi.
111. Monuments to the officers of the several Regiments who fell at Ferozeshah in the Ferozpur cemetery.
112. Battle-field monument at Mulki, Ferozpur.
113. Battle-field monument at Ferozeshah.
114. Battle-field monument at Sobraon.
115. Tomb of Sir Henry Durand at Dera Ismail Khan.
116. Monument in the Public Garden, Gurdaspur, to the soldiers killed in the action at Trimia Ghât, 1857.
117. Memorial Irish Cross, Chilianwalla, detailing the names of officers killed in the battle.
118. Monument in a garden at Gurdaspur to the soldiers who died of wounds received at Trimia Ghât.
119. Tomb of Lord Elgin at Dhurmsalla.

Punjab—*contd.*

120. Monument in memory of those killed at Hissar in 1857.
121. Memorial at Montgomery of Leopold Oliver Fitzhardinge Berkely, Extra Assistant Commissioner, killed in 1857.
122. Monument over the bodies of officers killed at Chatrian, Sirsa District, 1857.
123. Battle-field obelisk at Chilianwalla, and graves of men who fell in 1849.
124. Battle-field obelisk at Aliwal, Ludhiana.
125. Monument erected in memory of Mr. Vans Agnew and Lieutenant William Anderson, at Multan, in the Fort; also Tablet in the Idgah at Multan to the same.

Maur.

126. Equestrian statue of Lieutenant-General Sir Mark Cubbon, Commissioner of Maur and Curg (by Marochetti), in front of the Maur Government offices, Bangalore, bronze.
127. Cenotaph of the officers who fell at the siege of Bangalore, 1792.
128. Cenotaphs at Bangalore to officers and men killed in the campaigns of 1791-92 and 1799.
129. Monument at Seringapatam to Richard, Marquess Wellesley, K.P., Governor General of India, erected by Krishna Raja Wodeyar, Bahadur, 1804.
130. Monument to Josiah Webb, erected by Purnah Diwan at Seringapatam.
131. Monument at Sabbal Rani Hill, Seringapatam, to the officers of H. M.'s 12th and 74th Regiments killed or died during the siege of Seringapatam, 1799.
132. Tomb of Captain Onslow Gore, an Engineer Officer who fell at the battle of Arikere in the Manjarabad Taluq, Hassan District, 1800.

Bombay.

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| 133. Statue of Sir Charles Forbes. | } Id the Town Hall, Bombay. |
| 134. Statue of Hon. Mountstuart Elphinstone. | |
| 135. Statue of Sir John Malcolm. | |
| 136. Statue of John, Lord Elphinstone. | |
| 137. Sitting statue of Mr. Stephen Babington. | |
| 138. Statue of Sir Bartle Frere. | } Garden enclosure of the Elphinstone Circle, Bombay. |
| 139. Sitting statue of Mr. Charles Norris. | |
| 140. Sitting statue of Sir Jamsetji Jejeebhoy. | |
| 141. Statue of Lord Cornwallis. | } Garden enclosure of the Elphinstone Circle, Bombay. |
| 142. Sitting statue of the Marquis of Wellesley. | |
| 143. Sitting statue of Her Majesty Queen Victoria on the Esplanade, Bombay. | |
| 144. Statue of the Prince of Wales. | |
| 145. Statue of Prince Albert. | |
| 146. Statue of the Honourable Jugganath Sunkersett, in the Fort. | |
| 147. Statue of Sir Jamsetji Jejeebhoy, Bart., Jamsetji Jejeebhoy Hospital, Byculla. | |
| 148. Memorial marble tablets of the officers and men who fell in the Afghanistan and Sind campaigns, on the walls of the apse and chancel of St. John's Church at Colaba. | |
| 149. Old Dutch tombs at Ahmedabad. | |
| 150. Monument in the wall of the town of Ahmadnuggur, naming those who fell at the storming of the city in 1803. | |
| 151. Monument at Koregaum, near Puna, to the 2nd Bombay Grenadiers. | |

Bombay—contd.

152. Grave in Kanara of Lord St. Maur, son of the Duke of Somerset, killed in 1865 by a bear at Kirwatty, near Yellapur.
153. Grave in Kanara of Lieutenant Carpendale, who died at Yellapur while surveying the Arbyle Ghaut Road.
154. Memorial cross at Páua to Lord Frederick FitzClarence.
155. Monument at Kawulkad, Kanara, in memory of Lieutenant John Edgar Leslie, Madras Native Infantry, who died in service on 20th March 1845.
156. Tomb at Murkwad, Kanara, in memory of Lieutenant Mortlock.
157. Monuments at Aden over the officers and men who fell at the capture of Aden in 1839.
158. Tomb of John Thackeray, Collector and Political Agent, killed at Kittur in 1824, during the insurrection, at Kittur in Dharwar.
159. Wooden cross with metal tablet bearing Latin inscription in the "Mula's Ward" of Surat—marks site of ancient Capuchin Chapel.
160. Oxenden Mausoleum, Surat.
161. Tombs at Surat of Gerald Angier (supposed) Bernard Wyche, F. Breton, H. Gary, and B. Harris; former Presidents and merchants of Surat.
162. Tomb of Van Reede, Dutch President of Surat, and other Dutch tombs of same epoch, near the preceding.
163. Tom Coryat's tomb—old European burial-ground, Swali, near Surat.
164. Vaux's tomb on right bank of Tapti, not far from its mouth—near Surat.
165. Tomb of Brigadier David Wedderburn, killed at siege of Broach, 1772, near North-Western bastion of Fort Broach.
166. Tomb of Captain William Sempil, killed at Broach, 1803, near village of Pejalpur, Broach.
167. Tomb of M. Francois Montreux, a Portuguese officer, who seems to have taken part in siege of Broach, 1803, near the preceding.
168. Dutch tombs—about one mile west of Pejalpur, Broach.

Sind.

169. Tomb of Edward Cooke, with peculiar inscription, 1743—Tatta in Sind.
170. Old European burial-ground on Bandar Road, Karachi.
171. Napier Obelisk (1853) in memory of Sir Charles Napier—Napier Mole Road—Karachi.
172. Monument bearing names of officers and men who fell on the battle-field of Miani, Haiderabad, Sind.
173. Monument—in Government House grounds, Karachi, erected by Sir C. Napier to memory of officers and men, 22nd Regiment, who fell in the Sind campaign.

Rajputana.

174. Bust with inscription at Ajmir of the late Colonel Sutherland.
175. Monument of red sandstone erected to the memory of Lieutenant-Colonel John Ludlow, C.B.—1822 at Barod—Kotah State.
176. Tomb of the late Colonel Dixon in the Beawur cemetery (Ajmir-Merwara).
177. Tomb in the old cemetery, Jaipur, to the memory of Mr. Martin Blake, B.C.S., Assistant to the Governor General, Rajputana, murdered at Jaipur on the 4th June 1835.
178. A large monument at Lalsot, 24 miles to the north of Dosa, Jaipur State, erected to the memory of an officer (name unknown) who died there.
179. The Hastings Bridge erected in 1818 by Colonel Tod 6 miles east of Kotah in commemoration of the victory over a body of Pindaris.

Rajputana—*contd.*

180. Monument near Mangrol (Kotah State) to Lieutenants Clarke and Read of the 4th Regiment, Bengal Light Cavalry, killed in a fray with the forces of the Maharao Kishori Singh, 1821.
181. Monument in the Kotah graveyard in memory of Brevet Major C. A. Barton and two sons killed in defending the Residency against mutineers, 1857.

Central Provinces.

182. Monument and tombs in the Sitabuldi Hill Fort to the memory of officers killed at the battle of Sitabuldi in 1817.
183. Grave at Bera Ghât, 9 miles from Jubbulpur, of a gentleman who while in a boat on the Narbadda jumped into the river to save himself from bees and was drowned.
184. Monument at Saugor in memory of General Wallace; General Sir T. Ambury, K.C.B.; C. A. Molony, B.C.S., Agent, Governor General, Saugor and Narbadda Territories; E. W. Cockerell, B.C.S., Assistant to Agent, Governor General, Saugor and Narbadda Territories.
185. Cross at Karinjia, Mandla District, erected in 1867 in memory of missionaries who died there.
186. Graves of officers and men who fell at the siege of Chanda, 1818, at Chanda.
- 186a. Masonry grave at Sahbhhatta in the Patna State, bordering on the Sonpur State, Sambhalpur District,—said to be to an officer in command of troops proceeding during the last century from Cuttack to quiet a disturbance in the Bora Sambar Zamindari.
- 186b. Masonry monument at Semrapali, Sarangarh State, Sambhalpur District, to A. C. Elliott, who died in 1778 on a Political Mission to the Raja of Nagpur.

British Burma.

187. Graves at the Shive-Dagsu Pagoda, Rangoon, of officers and men killed at the storming of the Pagoda in 1852.
188. Graves at the Botatoung Pagoda, Rangoon, of officers and men who fell or died in the second Burmese War, 1852-53.
189. Tombs on the platform of the Shway Dagon Pagoda, Rangoon, of officers killed in the operations, 1852-53.

Haiderabad, Deccan.

190. Assaye battle-field monument (43 miles north-east of Aurangabad), 1803.

Assam.

191. Memorial at Cherra Punji to the memory of David Scott, B.C.S., Agent to the Governor General, who died 20th August 1831.
192. Monument of plastered stone with a tablet at Nongkhilao in the Khasi Hills, 35 miles north-west of Shillong, to Lieutenants Bedingfield and Burlton, massacred by Khasias, 1829.
193. Stone cairn at Kohima to the memory of Mr. G. H. Damant, B.C.S., treacherously killed by Nagas, 1879.
194. Memorial stone at Khonoma to the memory of Mr. G. H. Damant, B.C.S.
195. Memorial stone at Khonoma to the memory of Major Cock, killed at the attack on Khonoma, 1879.
196. Tomb at Goalpara to Lieutenant Cresswell, died of a wound received in action against freebooters in Kamroop, 1794.

Madras.

197. Equestrian statue of General Neill, 1st Madras Fusiliers—Mount Road; bronze.
198. Monument in the Island at Seringapatam to the memory of Lieutenant-Colonel William Baillie, who was taken prisoner at Perumbakum, 10th September 1780, and died at Seringapatam in November 1782, erected in 1816 by his nephew, Lieutenant-Colonel John Baillie, Resident at Lucknow.
199. Statue of the Rev. Mr. Schwartz by Flaxman in the church at the little Fort, Tanjore.
200. Tower on the coast at Saluvanaikpatnam (Tanjore District) erected by the late Rajah of Tanjore to commemorate the battle of Waterloo.
201. Monument on the Red Hills west of Pondicherry to Major Stevens, Chief Engineer, killed in the trenches during the siege of Pondicherry, 1778.
202. Obelisk at Kotta Kuppam, north of Pondicherry, over graves of soldiers killed at the siege of Pondicherry, 1760.
203. Cenotaph at Tirukoilur to the memory of Arthur French, M.C.S., who died at Cuddalore in 1823.
204. Monuments to officers who fell or died of wounds received at Panjalam Kurichi, 1799-81, at Vellaram, Tinnevely District.
205. Equestrian statue of Sir Thomas Munro, once Governor of Madras, middle of Island at Madras; bronze.
206. On the parade-ground facing the Council House at Madras, stone canopy covering a large pedestrian marble statue of the Marquis of Cornwallis on a marble pedestal, decorated with groups of figures in alto-relievo, representing the surrender of the sons and suite of Tippu Sultan.
207. Monument at Patti Konda built in memory of Sir Thomas Munro, erected on the spot where he died of cholera.
208. White marble statue of Sir Thomas Munro—Fort Church, Madras.
209. Cenotaph to the Marquis of Cornwallis, enclosed by an iron railing cast from the cannon taken at the siege of Seringapatam, 1799, by the troops under his command—Mount Road, Madras.
210. Cenotaph to Colonel Dalrymple—Parade-ground, St. Thomas' Mount, Madras.
211. Obelisk in memory of General Sydenham—St. Thomas' Mount, Madras.
212. Granite column to Colonel Noble, C.E., erected by the men of the Horse Artillery—St. Thomas' Mount, Madras.
213. A half-length marble bust (by Chantrey) to Colonel Noble, C.B., placed by the officers, Royal Horse Artillery, in the Church, St. Thomas' Mount, Madras.
214. Madras Memorial Hall—erected by public subscription in memory of the Madras Presidency not joining in the Sepoy Mutiny of 1857.
215. "Lal Bagh" Seringapatam, a mausoleum built by Tippu Sultan for his father, and in which he also was buried. The folding doors inlaid with ivory, were the gift of Lord Dalhousie, and the Mausoleum is supported at Government expense.
216. Monuments to Colonel Brown and Captain Hislop, killed in the battle of Pullalore, Conjeeveram, 1781.
217. Monument on the Racecourse, Guindy, to the memory of Major Donald Mackay, who died in 1783.
218. Cyclone Monument in the Fort at Masulipatam to the memory of those who perished in 1864.

Appendix C.

Catalogue of works of Reference bearing on Indian and Oriental Architecture, Art, and Archæology.

(Revised.)

(I)

Catalogue of Books, &c., bearing on Indian Art.

- ALEXANDER (JAMES EDWARD).—Travels from India to England; comprehending a visit to the Burma Empire, and a journey through Persia, Asia Minor, European Turkey, etc., in the years 1825-26. Illustrated with maps and plates.—4to: London, 1827.
- ANNESLEY (GEORGE VISCOUNT VALENTIA).—Voyages and Travels to India, Ceylon, the Red Sea, Abyssinia, and Egypt, in the years 1802-06. By George Viscount Valentia. Plates and maps.—3 vols., 4to: London, 1809.
- ATKINSON (E. T.).—Statistical, Descriptive, and Historical Accounts of the North-Western Provinces.—Vols. I to VI, and vol. X, *North-Western Provinces Government Press, Allahabad, 1874*.
- ATKINSON (JAMES).—Sketches in Afghanistan, by James Atkinson, Esq. [lithographed plates by Louis and Charles Haghe].—Folio: London, n. d., 1842.
- ATHANASIUS NITHIKINS.—Travels in the Deccan, 1470. Translated by R. M. Mayors, Esq., Hakluyt Society.
- BELNOS (MRS. S. C.).—The Sundhya or the Daily Prayers of the Brahmins. Illustrated in a Series of Original Drawings from nature, demonstrating their attitudes and different signs and figures performed by them during the Ceremonies of their morning Devotions, and likewise their Poojas, etc. In 24 (coloured) plates, by Mrs. S. C. Belnos.—Imp. folio: London, 1851.
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Appendix D.

Reports and correspondence, &c., concerning Ancient Monuments in Madras.

1. The tour of the Right Honourable the Governor of Madras in July 1882 gave an impetus to various works connected with monuments of interest in the Presidency. Mr. Grant Duff's minute of the 29th July notices the following:—

Mr. Grant Duff's tour and official minute.

(a) The bath at Trichinopoly in which Bishop Heber was drowned (a tablet has since been erected by the Madras Government).

Bath where Bishop Heber was drowned.

(b) The monument of the Missionary Schwartz by Flaxman at Tanjore, mentioned in paragraph 18 of His Excellency's minute as being threatened by the insecurity of the little Fort Church. (Enquiries were directed by the Madras Government for repairs.)

Flaxman's monument of Schwartz.

(c) The ruins in the fort at Arcot made historical by Clive. (Further destruction by the use of the materials for building purposes was prohibited by the Madras Government.)

Fort at Arcot.

(d) The ruins of Bijanagar on which in paragraph 33 His Excellency makes the following observations:—

Bijanagar.

"Several persons have lately been appointed at the expense of the Public Works Department to protect these extremely curious remains of antiquity; but it is doubtful whether they quite understand their duties, and the Collector, Mr. Gordon, had to speak to his subordinates on this subject while I was there. Be this as it may, no time should be lost in arresting the further progress of mischief. Arboreal vegetation should be ruthlessly destroyed. . . . The centre of the most important of all the temples wants immediate attention. If it can be saved at all, it can only be saved by being looked to speedily."

Native Customhouse.

Necessity for mudies.

and the Collector, Mr. Gordon, had to speak to his subordinates on this subject while I was there. Be this as it may, no time should be lost in arresting the further progress of mischief. Arboreal vegetation should be ruthlessly destroyed. . . . The centre of the most important of all the temples wants immediate attention. If it can be saved at all, it can only be saved by being looked to speedily."

(e) The Vishnavite and Shivite temples at Tadpatri in danger from the floods of the river Pennair, on which Mr. Grant Duff remarks:—

Temples at Tadpatri.

"From information obtained on the spot I am led to believe there are ample funds to prevent any harm coming to these interesting edifices, in the hands of their managers, if they will only use them."

2. During September 1882 I addressed the Madras Public Works Department on the subject of the repairs to the Bijanagar monuments and was informed that a grant of Rs. 5,000 would be sufficient for present requirements.

Grant for Bijanagar ruins.

3. The repairs to the temple in the Vellore Fort (see page cxvii of the Annual Report for 1881-82) were finished in September, and I received and signed the completion report, which pursuant to the general orders of the Madras Government had been sent to me by the Executive Engineer of the North Arcot Division.

Temple in the Vellore Fort.

4. On my way to Amaravati in November, I conferred with Colonel Sankey C.B., R.E., in Madras on the subject of the employment of a special officer to undertake repairs to ancient monuments, and Mr. H. C. Black, C.E., was offered, and accepted, a temporary appointment as Assistant Engineer. The General Orders of the Madras Gov-

Special Officer for Madras.

ernment, Public Works Department (No. 3214 of the 6th December 1882), specified Mr. Black's position as follows:—

"Mr. Black will work directly under the orders of the Superintending Engineer of the Circle in which his work for the moment may be placed, all such estimates as may be framed by him going, however, direct in the first instance to the Curator of Ancient Monuments in India for transmission to the Government of Madras.

"Mr. Black will be supplied from the Public Works Secretariat with the several notes drawn up by Captain Cole on the requirements of the monuments in Southern India, also the papers regarding the ruins at Hampi and the Seven Pagodas, and will then proceed to Bellary to commence work at Hampi, where he will as soon as possible prepare an estimate for submission to Captain Cole."

5. I visited Amarāvati and submitted the following report:—

Report on the Buddhist
Tope at Amarāvati.

Memorandum on the present condition of the Amarāvati Tope, dated Masulipatam, the 24th November 1882.

"(1.) I have just returned from a careful inspection of the Buddhist ruins at Amarāvati, and have had the advantage of conferring with Mr. Horsfall, Collector of the Kistna District, who superintended the excavations ordered by the Duke of Buckingham in 1880. I also met Mr. Mackenzie, the Sub-Collector, and Mr. Grant, the Executive Engineer at Amarāvati itself, and am now able to give a description of the remains of the tope and its sculptures, and to offer an opinion on the best means of preserving them.

"(2.) Paragraph 7 of the accompanying report on Amarāvati and the panoramic sketch attached to it will explain the condition of the tope after the excavations of 1880 had been completed.

"(3.) Since then Dr. Burgess, Archaeological Surveyor for Western and Southern India, spent upwards of a month, between December 1881 and January 1882, in examining the tope and in selecting and packing those sculptures which he considered worthy of removal to the Madras Museum. These stones, numbering 175, were carried to the bank of the River Kistna, about half a mile north of Amarāvati, where they now are in a fenced enclosure and under the care of a native custodian. It is scarcely necessary to say that the stones comprise the finest sculptures and the most important historical records of the Great Tope. They appear to me in good condition and undamaged by the recent floods. They had been taken out of their cases to be freed from the straw which enveloped them, and, as far as I was able to judge, the action of the water had beneficially cleared the carvings.

"(4.) The number of stone sculptures at Amarāvati are as follows:—

Number of sculptures at Amarāvati.

(a) Sculptures of Dr. Burgess' selection on the river bank	175
(b) Sculptures at the tope—	
In a shed in the north	8
Ditto	43
In situ	192
Total	225
	421

Of those that are *in situ*, i.e., on the circular area covered by the tope and railings, there are several that are undoubtedly in their original places, and from these the position of the railing and that of the mound, which must have been in the centre, can be clearly traced.

"(5.) At the northern entrance nearest to the village of Amarāvati is the shed in which are the stones, deposited in 1877 by Mr. Sewell (see sketch and references). His excavations extended from K to L along the circumference, the remainder of which was excavated by Mr. Horsfall in 1880. Passing round to the west, the stone terrace at the point marked A is still remaining, although a good deal damaged. At B a portion of the outer railing is in its original position. Further round there is another piece of railing in position (D), and the southern entrance (F) may be traced by the pieces of railing and masonry which still remain. Passing round to the east a large slab (G) is erect, and further on is a portion of the outer railing H. Besides these stones, which indicate part of the outline of the original structure, there are various smaller fragments and masonry slabs in position to complete the demarcation of the railing and girth of the tope itself.

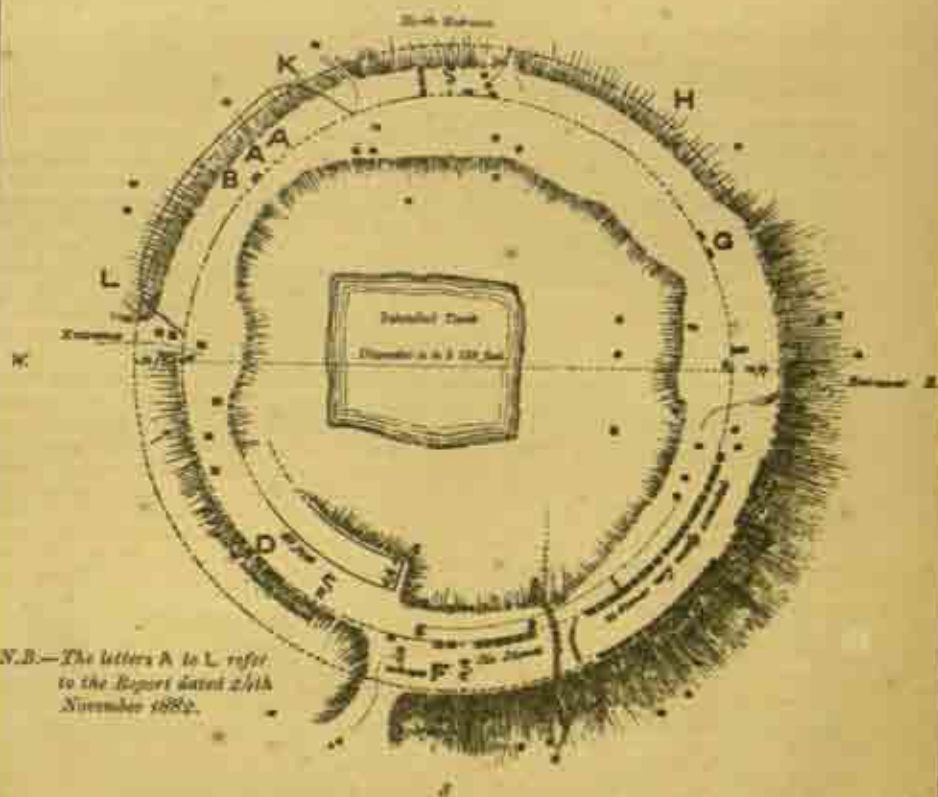
PLAN OF AMRAVATI

MADE IN 1815

BY

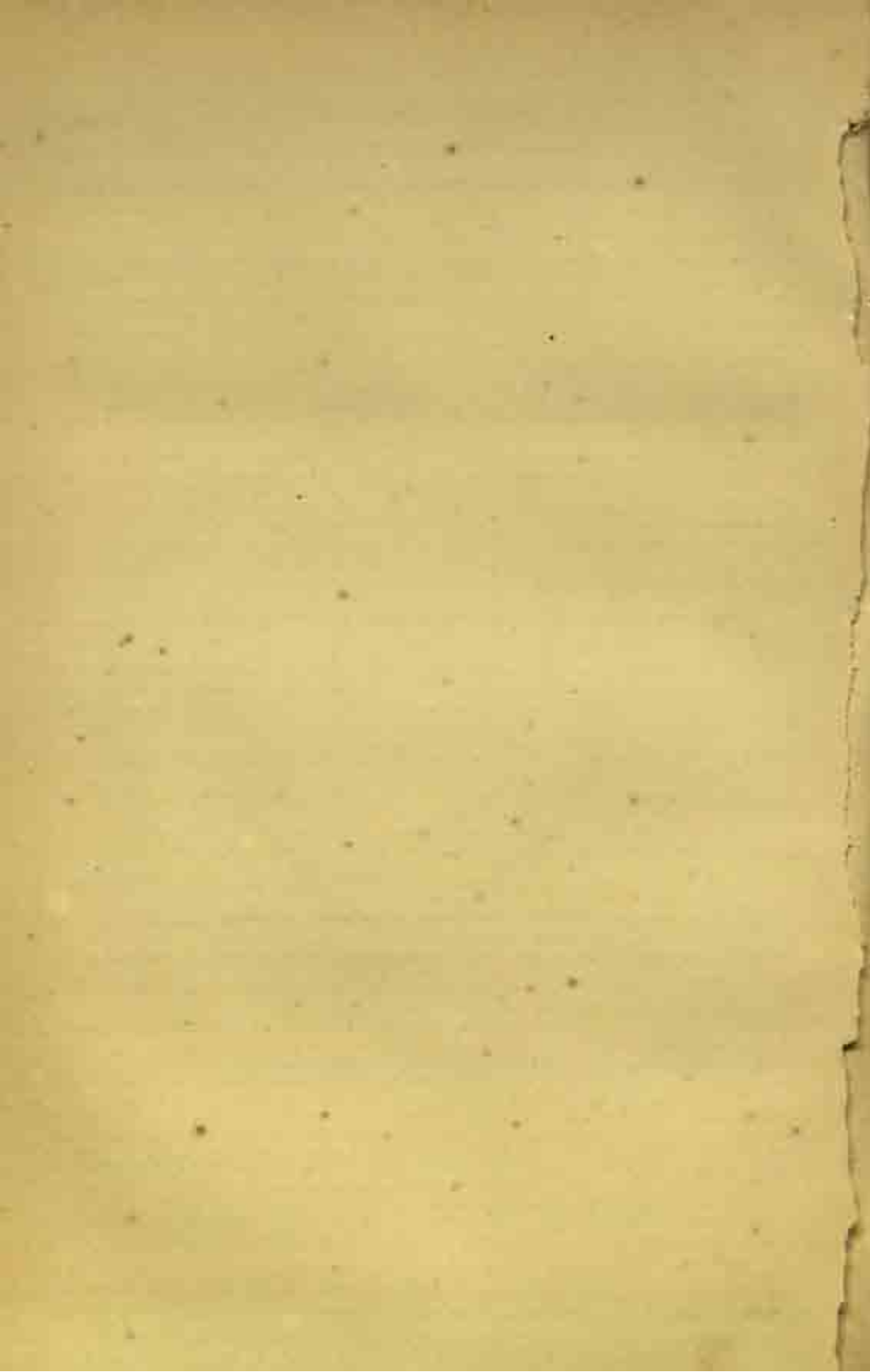
Colonel Mackenzie.

N



N.B.—The letters A to L refer to the Report dated 2/11 November 1882.

SCALE OF FEET



"(6.) Of the 245 stones recorded as being now at the *tope*, a small proportion go to make up those that remain fixed in position. A good many lie scattered round and about the railings, but the greater number are in the centre of the circle, to which position they were removed for Dr. Burgess' operations.

Stones at the site.

"(7.) I cannot believe that the shattered condition of the masonry and its carvings can be attributed to the natives of Amarāvati, who are mostly Hindus. It is true that the grandfather of the present zamindar is known to have removed brick and stone from the central mound to build his palace and for the purpose of adding to the temple close to it, but he would have been simply concerned in getting the material and not in wantonly delating the sculptures or smashing up the stone blocks. The demolition of the mound, as well as the ruin of the surrounding railings and entrances, had been effected before we first knew of the *tope* through Colonel Mackenzie in 1816; I believe that the real destroyers were the Muhammadans, who, under the iconoclast Alamgir, conquered the district and established themselves in the forts of Kondapalli and Kondavid in the neighbourhood.

"Such destruction as Alamgir was wont to deal on all temples of the hated idol-worshippers would have left the sculptures scattered round the *tope*. The subsequent demolition of the central mound by the zamindar would have covered them up with layers of earth and debris, to which the subsequent excavation of the tank in the centre (or, more probably, digging for treasure) would have contributed. I am assured by Mr. Horsfall that the excavation of 1880 overturned no stones from their original places; that the sculptures laid bare were not injured by the process of excavation; and that the central mound had previously disappeared, and no relic or stones were found on its site.

"(10.) The recommendations I beg leave to submit for the conservation of the Amarāvati *tope* are as follow:—

Recommendations for preservative measures.

- "(A.) The masonry terrace-rails and fragments now in their proper positions and described at paragraph 5 of this note should be rendered secure. The existing portions of terrace should be relied on concrete and in cement. The rails should be supported in their places by a solid foundation of concrete and by using iron bars to prop the uprights and hold them in position.
- "(B.) All the fragmentary sculptures should be collected and placed under a permanent shed in the centre of the circular enclosure.
- "(C.) The bank of earth formed round the *tope* by the demolition of the mound in past years should be gently sloped off so as to prevent the falling in of earth, such as has occurred during the last rains. This will probably lead to the discovery of more stones; two fresh ones had been partly revealed in the bank, and were got out during my visit by Mr. Mackenzie, the Sub-Collector.
- "(D.) A masonry wall 7 feet high should be erected round the ruins, and have an entrance gate at the north under lock and key.
- "(E.) Near this gate should be a small house for the native custodian.

"(12.) Any attempt to restore the structure—unless it is possible to ascertain with certainty the former position of particular portions—is most undesirable, but the majority of the stones are easily identified as being parts of the railing or plinth, and their retention at the Amarāvati enclosure would be an *in situ* preservation, even if they were not in their original structural positions and were merely placed on the ground so as to be easily inspected and examined.

Repairs.

"(13.) It would be expedient to have all the best Amarāvati sculptures photographed; and if the recommendations in this note are adopted, completion of photographs should illustrate the condition of the *tope* and the beneficial effect of the remedies. It would, however, be necessary to employ a good professional photographer to take the negatives (which should become the property of Government by printing by a permanent process), as amateur work is usually unsatisfactory and not worth using for purposes of publication.

Photographs.

"(14.) It will be necessary to charge a special officer with the duty of carrying out the suggestions; and the arrangements will, I hope, be undertaken at once. The cost, exclusive of casts and photography, will probably be some Rs. 5,000."

Special officer for repairs.

6. Mr. Black proceeded to Hampi, and on the 24th December sent me a report and rough estimate for repairing the Vittala Swami temple at Bijanagar. This amounted to

Mr. Black's preliminary estimates for Hampi.

Rs. 870 for cutting jungle, and Rs. 4,237 for repairs to the building. I returned the papers with certain suggested modifications.

7. On the 17th of January 1883, Mr. Black sent a further report on the Mr. Black's report on the Vittala Swami temple which I returned with a general approval of the remedies proposed.

8. The estimate for cutting down jungle and clearing from brushwood the enclosures to, and surroundings of, the Hampi temples, amounting to Rs. 870, was sanctioned by the Madras Government, and Mr. Black directed to revise the estimate for repairs to the temple itself in accordance with my recommendations.

9. A sum of Rs. 5,000 had been allotted for the work out of my budget Allotment for imperial funds. grant for 1882-83.

10. The following report by Mr. Black specifies what he has accomplished

Mr. Black's report of work at Bijanagar:—

"The outrooting of the jungle on all the buildings has been completed, about 110 buildings in all having been cleared. Some extirpation of roots by means of poisoning with mercury remains to be done and is in progress. These roots are chiefly on the high walls surrounding the Muhammadan buildings of the zenana and council rooms, etc., which walls are put together with such accuracy as regards stone-cutting that poisoning with mercury is the only way of drying up the roots.

"The roof of the Vimanah or inner closed hall has been partly removed so as to get at the broken stone beams which supported it. A plan of the roof is herewith sent. It shows the portion destroyed by the Muhammadans, and also the stone beams which it is necessary to replace. These latter are shown of a darker shade. Five stone beams have been chosen from the adjacent ruins to replace the broken ones. These latter are quite plain, being merely squared stone, without any carving, but as the former beams had but slight carving on them, the new ones will not appear irregular. They have been brought to the work, and ready for hoisting into place. Some more of this roof must be taken off to replace the broken beams; but wooden sleepers must be obtained to make low strong stagings under the cracked stone beams. Old sleepers have been applied for from the Southern Mahratta and the Madras Railways; but none were to be had. Undesignated hopes to get about 150 at Madras. No sort of direct propping with posts would be strong enough to support the great weight of these stones. Rails have also been applied for from both the above railways, but can only be obtained from the office of the Madras Railway at Madras. About 6 or 8 tons or say 30 or 40 rails are necessary, as so many beams and lintels are cracked and broken. The coating of plaster on the roofs of the two adjacent temples of Basani and Kallian Mantapas will be put in hand at once. There is very little leakage through these roofs.

"The outside coating of granite ashlar of these walls had separated itself from the inside filling and was falling down. The south-west corner has been taken in hand first, and has been dismantled down to

ground level. It is now being rebuilt and is above the level of the plinth. It is very necessary to do this work quickly and well, as the standing portion is unsupported and in a somewhat dangerous condition. The other parts of the walls which require it will be gone on with at once. This work is the most important part of the repairs. Some additions to the temple, which

stone and brick modern additions. were put up by natives, have been removed. These were a clumsy two-storied shed in the main porch, and a long narrow shed inside the closed hall. The first of these has been entirely removed and the second partially so. Photographic negatives of these two places were taken before work was commenced. The brick walls in the inside hall have been partly cleared away, but more could not be done until the roof was propped. In clearing out the said hall a rather good sandstone statue was found. It had been erected at the entrance of the sanctum as a door-keeper. Perhaps the corresponding one may be also found, in which case they might be set up again. All the broken debris that was lying in the main porch (see photograph) has been cleared away.

"The surrounding verandahs of the enclosure have had the stones partly sorted out, and about half of the fallen portion can be re-erected at a small cost. The parts of these verandahs that are too much ruined

to be set up again might be pulled down so as to leave only the back enclosure wall. One of the photographic negatives (No. 2) shows a portion of the colonnade entirely ruined."

"A general plan of Vittala Swami is herewith sent, showing the position of the buildings in the enclosure and three Gopuras, etc.

"Undersigned has also (considering that it might be wanted) been collecting materials for a short monograph of Bijanagar."

11. Mr. Black's revised estimate for work at Hampi amounting to Rs. 18,990

Mr. Black's revised estimates for work at Bijanagar.

having been referred to me, I returned it to the Madras Government on the 9th of June 1883 with a general approval of the measures provided for, but recommending the main structure of the Vittala Swami temple to be first repaired. I also offered a grant-in-aid of Rs. 10,000 to supplement the 5,000 provided in the Madras Budget, 1883-84, for preserving monuments, and suggested the following allotments:—

	Rs.
For Hampi	4,000
For Amaravati	2,400
Seven Pagodas	1,600

12. The Madras Government has since sanctioned the estimate for Bijanagar amounting to Rs. 18,990, which includes—

Bijanagar estimate sanctioned.

Vittala Swami temple—

	Rs.
Main building	4,050
Colonnades	3,550
Subsidiary temples	1,320
Temple of Victory	1,450
Queen's Baths	300
Ranganath Swami temple	500

9,520

(Vide page cxxix of Annual Report for 1881-82 for notes on Bijanagar and Hampi.)

13. Mr. Black on the 18th June last forwarded his estimate for carrying out

Mr. Black's estimate for the Seven pagodas.

certain repairs recommended by me for the Seven Pagodas (see page cxiii of the Annual Report for 1881-82). This amounts in all to Rs. 2,228.

14. In paragraphs 13 and 14, page cxiv of the Annual Report for 1881-82,

Removal of sand from the Alaiva temple on the coast at the Seven Pagodas.

I described the deserted "Alaiva" or Shore temple at the Seven Pagodas, and recommended the removal of sand.

I have now heard from Mr. Black. He writes—

"At the Alaiva temple here I have excavated both sides of the wall of the outer enclosure. . . . The walls are from 6 to 7 feet deep, and the lower portions of them are very perfect, some carved griffins heads (near the base) which were coated with stucco being quite sharp and clean, though having been protected by being buried in sand. When the walls are quite excavated they will form a most interesting completion to the temple, which is at present rather small and wanting in completeness without the enclosure. The walls are ornamental with the small conventional lion's rampart, which are so common on the temple itself, but these are much less weather-worn."

15. After the determination of what is to be done in the way of preservative measures at Amarāvati, it will remain for the Madras Government to say how the available funds are to be allotted.

16. The operations at all three places will have to be carefully watched during progress, and certainly inspected *once* by me during the present year. I do not anticipate very rapid progress, as the funds are limited; the work requires great care, and the climatic conditions of the three localities are such as to make it only possible for work during certain seasons.

Appendix E.

Reports and correspondence concerning Ancient Monuments in Bombay.

1. In April 1882 a proposal was communicated to me by the Bombay Public Works Department for rebuilding a portion of the *Mahratta Palace at Poona.* [which had been burnt.] for use as a high school, in reply to which I submitted an opinion that, unless the original architectural appearance of the old palace was to be faithfully preserved, the project did not appear to me as coming within the scope of preservation of ancient monuments.
2. In May 1882 a Resolution of the Bombay Government in the Public Works Department, No. 326-C.W.—792 of 1882, ordered plans and estimates for the restoration and repair of certain ruins at Bijapur to be taken up as soon as practicable and submitted in communication with me.
3. The Bombay Government in May 1882 called the attention of the officers and departments concerned to some suggestions offered by me in the following letter, No. 174, dated 24th April 1882:—

"2. I would ask to be allowed to see the plans and specifications for carrying out the suggestions contained in the preliminary reports on Bijapur, Ahmedabad, Kärli, or Ambarnath, in order to ascertain what is contemplated or to recommend grants-in-aid from Imperial Funds.

"3. The Resolution No. 284-C.W.—802 of 1881 of Public Works Department, dated Bombay Castle, 7th July 1881, referring to buildings at Bijapur, directs restoration and repair estimates to be framed in accordance with the views submitted by me to Government. Resolution No. 100-C.W.—277 of 1882 in the Public Works Department, referring to the Vishrambag Palace at Poona, dated Bombay Castle, 18th February 1882, directed the preparation of a project for restoring the palace. Resolution in the General Department, No. 3048 of the 22nd November 1881, called for definite proposals from the Collectors concerned in respect of Ahmedabad, Kärli, Ambarnath, &c., and Resolution of the Public Works Department, No. 100-C.W.—301 of 1882, sanctioned the provision of iron gates to the Kärli Caves.

"4. It is obvious that unless I am permitted to see such projects, it becomes difficult for me to make any suggestions. As regards Ahmedabad, I believe that it will be found necessary to appoint an officer to specially take charge of the public monuments of interest, and the Supreme Government could probably be induced to contribute towards the cost.

"5. I would also most respectfully urge the consideration of Government to the important question of how far buildings possessing beautiful interiors or those of a religious character should be retained for use as offices or as dwellings or stores.

"6. Paragraph 5, page 5, and a note on the Anand Mahäl, page 8, of the Bijapur report, and paragraphs 9, 15, 39, 45, and 53 of the reports on Ahmedabad and Kärli (see Annual Report, 1881-82), allude to some cases of buildings the appropriation of which will, I submit, invite undesirable criticism among those who take an interest in the conservation of ancient monuments in India. The conversion of temples, mosques, or tombs into dwellings can scarcely be carried out without damage to their architectural appearance, and the provision of such necessities as bathing, retiring, and cooking rooms either defiles the buildings or brings a crowd of objectionable erections into their vicinity. I should fail in my duty if I omitted to express my convictions on these points; but, having done so, I can only hope that they will receive full consideration.

"7. I would venture to recommend that photographs be taken to show the condition of buildings before, during, and after remedies for conservation have been undertaken. Many people who now visit the Taj at Agra and admire its beautiful structures and gardens have no idea of the picture of neglect presented before the repairs were carried out, and so it is with many other monuments throughout India.

"8. I may also remark that in the course of my experience there has sometimes been insufficient data for carrying out restorations of buildings, mistakes either of omission or commission being the result. No such cases have come under my notice in Bombay; but to guard against their occurrence it is most useful to possess old drawings of buildings made either by natives or by travellers (see, for instance, *Antiquities and Views in India from the Drawings of Thomas Daniell* (143 no. number), published by T. and W. Daniell in London, 1796). Native drawings are still procurable, but diligent search has to be made before they come to light. I would recommend that local officials be invited to advertise for old drawings of ancient buildings in the Bombay Presidency, and that a collection be formed which, if sufficiently valuable, could be purchased and published.

"9. In conclusion, I solicit your permission to the communication to me of copies of all papers, &c., relating to works of conservation throughout the Presidency and to particulars of works sanctioned for execution either in the Civil or Public Works Department."

4. Reports having been referred to me from the Collectors of Poona and Thana on the subject of monuments in their districts, I submitted the following observations to the Bombay Government:—

..... I have the honour to mention in respect of the Kārli Caves that the removal of the small temple from the front of the entrance is not essential nor recommended.

"It cannot be doubted that the Hindus who frequent the Kārli Caves worship the Dagoba inside in ignorance. Similar cases of mistaken identity are to be found elsewhere in India, as for instance at Gaya in Bengal, where five placid figures of Buddha have been made to do duty as the 'Panch Pandavas' and are worshipped as such by the Hindus. Government very wisely abstains as much as possible from interfering in matters of superstition, although I suppose there would be interference if the Buddhists were present at Kārli to protest. Yet I think the line may be drawn in discountenancing misappropriation of emblems in a case like this. Educated Hindus would, I think, concur in this course. Let the Hindu fishermen venerate the Dagoba as much as they like, but they have in my opinion no business to paint it as a Lingam, or to white-wash the Buddhist carvings and paint the eyes of the figures black. I should say that the Brahmins would settle the matter and smooth all difficulties in the way of cleaning the carvings of this most interesting rock-cut temple.

"As regards the temple at Ambarnāth, I quite concur in the views expressed by the Collector of Thana, and hope Government will sanction the measures he particularises. I also support the recommendation that the lease of the Bassein Fort be not renewed, so that the ruins may receive preservative measures. This and the other places mentioned, I hope to visit before long; but the remedies for protection and custody specified by Mr. Mulock are, I submit, worthy of immediate adoption."

3. In December 1882 the following orders were passed:—

Orders of the Bombay Government on preservation of archaeological remains in the Poona and Thana Districts.

Archaeological Remains: Preservation of—in the Districts of Poona and Thana, No. 4866, dated Bombay Castle, 6th December 1881.

Memorandum from the Commissioner, C. D., No. R-3281, dated 20th July 1882, submitting for information the following letter from the Collector of Poona, No. 4412, dated 11th idem:—

"In reference to Government Resolution No. 2522, dated the 6th instant, General Department, I have the honour to state that I deprecate any interference with the ceremonies round the Dagoba, especially as they do no harm to the temple, but I will issue instructions with a view to prevent the carvings from being white-washed."

Memorandum from the Commissioner, N. D., No. 3948, dated 18th November 1882, forwarding, for sanction to the proposals made therein, the following letter from the Collector of Thana, No. 5855, dated 15th idem:—

"With reference to paragraph 2 of Government Resolution No. 2522 of 6th July last, I have the honour to report as follows:—

"1. The Executive Engineer informs me, in his No. 2802 of 20th September, that Government have sanctioned an expenditure of Rs. 586 for the preservation of the Temple of Ambarnāth, and that the work is being carried out.

"2. Captain Cole, R.E., with whom I have been in correspondence, has within the last few days visited the Bassein Fort, and he writes semi-officially to me: 'I spent several hours in looking over the old Portuguese churches, &c. I think something might be done to clear away

the jungle from the best buildings, also to preserve the inscribed stones and to strengthen the masonry of the various façades of the churches. The greatest eyesores are the Littlewood ruined sugar machinery."

"4. Rs. 8 a month would be sufficient for a custodian for the Kānheri Caves.

"5. Rs. 5 a year might be given to the Patel of Kamdane to look after the caves in his villages. The payment would ensure his not forgetting the duty.

"6. Regarding the Mahādev Temple at Lonad, the straw ricks have been removed, and orders have been issued to the Patel and talati to send an annual report on the state of the temple. The collections of the stones and the planting of the ledge would not cost more than Rs. 50 at the outside.

"7. There are some other caves in Sālette that probably deserve preservation:—

1.—The Mandapeshvar Cave, near the Borivli Station below a Roman Catholic Church and now in charge of the Roman Catholic community.

2.—The Magathan Cave, also near the Borivli Station.

3.—The fine Jogeshwari Cave near the Goregaon Station, the courtyard to which is a good deal choked up with earth and requires clearing out at a cost of Rs. 20.

4.—The Mahākāla Caves near Kondive village.

"8. From Captain Cole's letter to me I see he intends returning to Bombay early in December, when he hopes to see all the remains mentioned by me.

"9. He will in time submit his proposals regarding the preservation of the Basen ruins to Government and of the above also; until receipt of his proposals, I would not recommend mine being acted upon."

RESOLUTION.—Copies of the letters from the Collectory of Poona and Thāna should be forwarded to the Curator of Ancient Monuments in India with reference to Government Resolution No. 3522, dated the 6th July last, with an intimation that this Government will await receipt of his proposals referred to in paragraph 9 of Mr. Mulock's letter regarding the preservation of archeological remains in the Thāna District.

6. Early in December 1882, when I visited Bombay on my return from

Estimates for repairs to buildings at Ahmedabad and Bijapur. Madras, Colonel Merriman, C.S.I., R.E., the Secretary in the Public Works Department, made over to me a batch of estimates for repairs at Ahmedabad and

Bijapur, which I returned a few days after with suggestions, and placed Rs. 5,000 at the disposal of the Bombay Government for each of the two places.

7. The following orders with respect to Ahmedabad were passed on the

Orders of the Bombay Government on repairs to buildings at Ahmedabad. 23rd December:—

Monuments, Architectural, at Ahmedabad—Repairs to certain, No. 809, C. W.—2166, dated Bombay Castle, 23rd December 1882.

Memorandum from the Superintending Engineer, Northern Division, No. 2272 A., dated 25th October 1882.

"With reference to Government Resolution, No. 711—C. W.—1746, dated 27th September

1882, forwards a letter from the Executive Engineer, Ahmedabad, submitting, for the sanction of Government, estimates as per margin, for repairs to certain Mosques at Ahmedabad; and reporting that the estimates called for

in paragraph 3 of Government Resolution No. 950—C. W.—1692, dated 15th September 1882, are in hand and will be sent in due course; and remarks that, out of the Budget grant of Rs. 9,000, for Architectural remains at Ahmedabad, Rs. 8,246 have been allotted on various buildings in that district, and the balance, Rs. 654, has been granted to the temple at Andonath."

Memorandum from the Superintending Engineer, Northern Division, No. 2585 A., dated 5th December 1882.

"Forwards a letter from the Executive Engineer, Ahmedabad, submitting, for the sanction of Government, estimates as per margin, for the preservation of certain Architectural Monuments at Ahmedabad, and enclosing copy of a letter from the Collector of Ahmedabad for

perusal, as the remarks contained in paragraphs 2 and 3 of it appear to be very sound and

Estimate No. 274 of 1882, for making thorough repairs to Bāna Lāli's Mosque near Ahmedabad. Rs. 2,504

Estimate No. 275 of 1882, for making thorough repairs to Dād Hār's Mosque and Tomb in Sālette near Ahmedabad. Rs. 2,000

Estimate No. 276 of 1882, for repairing Sūrah Gāndhī's Mosque and Tomb at Unescent. Rs. 12,208

Estimate No. 277 of 1882, for repairs to two Tombs and one Mosque at Borivli. Rs. 2,250

judicious; states that the estimates have been framed as well as they can be, but they cannot be considered satisfactory as this Department is not trained to this kind of work; and recommends that the Executive Engineers may be relieved of this duty which occupies much of their time, and that it may be handed over to an officer specially appointed, as proposed in paragraph 2 of Government Resolution No. 711-C. W.—1746, dated 27th September 1882."

Letter from the Curator of Ancient Monuments in India, No. 727, dated 9th December 1882.

"Returns the estimates noted in the margin, and states that he has recommended the first, and has asked the Comptroller General to place Rs. 5,000 at the disposal of this Department for the purpose. Strongly recommends that photographic negatives be obtained for him of the buildings before and after they are completed."

Sayad Usman's Mosque and Tomb	Rs. 12,400
Bahau	" 8,725
Bahau Loh's Mosque and Tomb	" 3,500
Ellah Hatt's Mosque and Tomb	" 2,000

"RESOLUTION.—The Government of India having made a grant of Rs. 5,000 for expenditure in the current year on repairs to the architectural monuments at Ahmedabad, the estimate, amounting to Rs. 12,400, for repairs to Sayad Usman's Mosque and Tomb, may be sanctioned, and the work may be put in hand.

1. Bahau	Rs. 8,725
2. Bahau Loh's Mosque and Tomb	" 3,500
3. Ellah Hatt's Mosque and Tomb	" 2,000

"2. The estimates as per margin may be returned to the Executive Engineer, Ahmedabad, for record pending further provision of funds.

"3. A photograph in negative with six proofs should be obtained and forwarded to Captain Cole as requested.

"4. The attention of the Executive Engineer should be drawn to the remarks made by Captain Cole on the estimates.

8. The following orders with respect to Bijapur were passed on the 23rd December 1882:—

Orders of the Bombay Government on repairs to buildings at Bijapur.

Monuments, Architectural, at Bijapur—Repairs to certain, No. 000-C. W.—2157, dated Bombay Castle, 25th December 1882.

Letter from the Superintending Engineer, Southern Division, No. 3028, dated 6th October 1882.

"With reference to Government Resolution No. 690-C. W.—1692, dated 15th September 1882, submits, for the sanction of Government, estimates as per margin, for making special repairs to the Mehtar Mahal and Mecca Masjid at Bijapur; states that the repairs are necessary to arrest further ruin in the case of these structures, which are remarkable for their architectural beauty; and remarks that there is great difficulty in obtaining work-people in sufficient numbers (more particularly masons) at Bijapur, and that it is very doubtful, even if funds should be available, whether the Executive Engineer will be able profitably to undertake any more work than he has now in hand."

Letter from the Superintending Engineer, Southern Division, No. 3211, dated 30th October 1882.

"In continuation of his No. 3028, dated 6th October 1882, and with reference to paragraph 3 of Government Resolution No. 690-C. W.—1692, dated 15th September 1882, submits, for the sanction of Government, an estimate, amounting to Rs. 1,676, framed by the Executive Engineer, Kaladgi, for making special repairs to the gateway of the Gagan Mahal in the Arkilla at Bijapur; reports that a sum of Rs. 500 was sanctioned from the repair assignment at his disposal, for removing debris and staying further ruin of this entrance gate, but that Mr. Reinold found that much more had to be done than was anticipated; and observes that the present estimate will, it is believed, suffice for all such repairs as are necessary to prevent further decay and to restore to a great extent the beautiful stucco work of the interior."

Letter from the Superintending Engineer, Southern Division, No. 3391, dated 15th November 1882.

"With reference to paragraph 3 of Government Resolution No. 690-C. W.—1692, dated 15th September 1882, and in continuation of his No. 3211, dated 30th October 1882, submits, for the sanction of Government, an estimate amounting to Rs. 12,027, framed by the Executive

Engineer, Kalādgi, for making special repairs to the buildings, known as the Ibrahim Raza, at Bijapur."

Letter from the Curator of Ancient Monuments in India, No. 726, dated 9th December 1882.

"Returns the estimates noted in the margin, and recommends the execution of the three last, amounting to Rs. 4,108, before the close of the present financial year; states that he has made some remarks on each estimate, strongly recommends that photographic negatives be obtained for him of the buildings before and after they are completed."

Bijapur—					
Ibrahim Raza	.	.	.	.	Rs. 1,007
Gagan Mahal	.	.	.	.	1,040
Mohar Mahal	.	.	.	.	1,555
Mecca Masjid	.	.	.	.	526

"RESOLUTION.—The Government of India having made a grant of Rs. 5,000 for expenditure in the current year on repairs to the architectural monuments at Bijapur, the estimates, noted in the margin, may be sanctioned, and the works may be put in hand."

1. Gagan Mahal	.	.	.	.	Rs. 1,007
2. Mohar Mahal	.	.	.	.	1,555
3. Mecca Masjid	.	.	.	.	526

"2. The estimate, amounting to Rs. 12,027, for repairs to the Ibrahim Raza, may be returned to the Executive Engineer, Kalādgi, for record, pending further provision of funds."

"3. A photograph in negative with six proofs should be obtained of each building and forwarded to Captain Cole as requested."

"4. The attention of the Executive Engineer should be drawn to the remarks made by Captain Cole on the estimates."

9. In January 1883 the Executive Engineer, Ahmedabad, with the concurrence of his Superintending Engineer, addressed me direct as follows:—

"Of the sum of Rs. 5,000 sanctioned in G. O. No. 2166, dated the 23rd ultimo, for repairs to Osman Khan's Mosque and Tomb, it will be impossible to spend more than Rs. 3,000 during the current official year owing to the shortness of time available for work and the distance from which stone has to be brought. It is therefore suggested that the Executive Engineer be empowered to expend Rs. 2,000 at once in removal of some of the buildings shown on the plan."

10. To this I replied on the 25th January 1883 that I saw no objection to the proposed modifications in the expenditure.

11. In reply to a request addressed to the Bombay Public Works, the Travellers' Bungalow at Bijapur, sanctioned estimate was sent to me in January 1883, for converting the Masjid of Mahmud at Bijapur into a Travellers' Bungalow. (See para. 2 of Inspection Note, page xcv.)

12. I addressed the following letter to the Bombay Government on the 21st May 1883:—

Letter to the Bombay Government on the general subject of conservation in the Presidency.

"I now have the honour to invite the attention of the Bombay Government to the unsatisfactory results obtained under the present system for executing works of conservation in the Bombay Presidency, and to solicit a reconsideration of the subject with the view of applying any available funds to the best advantage."

"It will be observed from the statements of the Executive Engineers at Ahmedabad and Bijapur that out of a grant of Rs. 10,000 furnished from my Budget for 1882-83, a total sum of only Rs. 2,719 was expended by these two officers, and thus Rs. 7,281 lapsed on the 31st March."

"As regards Ahmedabad, an estimate for Syad Usman's Mosque and Tomb, amounting to Rs. 12,398, was sanctioned on the 23rd December 1882, and the work ordered to be put in hand to the extent of the Rs. 5,000 granted by the Government of India. The Executive Engineer represented, however, on the 15th January 1883, that so large a sum could not be expended during the official year, and I agreed to his proposal to at once apply Rs. 2,000 to the removal of certain unsightly hovels round the Tomb of Ahmed Shah at Ahmedabad. Even this was not carried into effect, and the actual work done is represented by the sum of Rs. 278 expended in removing and rebuilding a stone wall. The balance of Rs. 1,588 is represented by materials at site, whilst a sum of Rs. 3,134 remained unutilised at the end of the year."

"As regards Bijapur, the following estimates were sanctioned:—

Gagan Mahal	.	.	.	.	Rs. 1,070
Mohar Mahal	.	.	.	.	1,565
Mecca Masjid	.	.	.	.	554

and the works were ordered to be put in hand. The actual repairs effected are represented by Rs. 518 on the Mecca Masjid, and Rs. 335 on the Gagan Mahal. A sum of Rs. 4,147 remaining unutilised at the end of March last.

"Although the sum of Rs. 7,281, which was thus surrendered, could have produced considerable good, I would far rather that the money remained unspent than the work be hurried or not first rate of its kind.

"I have not been able to inspect the wall that was rebuilt at Ahmedabad for Rs. 278, but as far as the work at Bijapur is concerned, the repairs to the Mecca Masjid would have been better left, for the most part, undone. It appeared to me that repairs in plaster had been applied without judgment, and the whole most unreasonably whitewashed. As I have explained in my letter No. 25 of the 18th April, Mr. Reinold, the Executive Engineer, was absent from Bijapur at the time of my visit, and I was accordingly unable to ascertain exactly what had been done to the two buildings in question.

"Resolution No. 518-C. W.—1238 of 1882, states that the preservative works recommended by me (see my preliminary reports on Bijapur and Ahmedabad, dated respectively 17th June and 20th October 1881) are beyond the means of the Bombay Government, whose funds are primarily required for works of public utility. From the experience of last year it is now apparent that when special funds are provided, the difficulties are by no means at an end.

"The recommendations contained in paragraph 5 of my letter No. 265 of the 22nd June 1882, are, I submit, sound, and my experience is that the expenditure to the best advantage of any special grant for preservation can only be secured by employing a special officer with aptitude and liking for this particular class of work. The best course would, I think, be to establish an ancient monuments sub-division, and to place a young officer on special duty for, say, two years. If an Engineer with suitable qualifications could not be spared from the Bombay Public Works Establishment, I would suggest that an application be made to the Government of India in the Public Works Department for the temporary transfer of an Assistant Engineer.

"The Punjab Government has lately established such a sub-division, and the Assistant Engineer in charge, Lieutenant Abbott, R.E., works both at Lahore and at Delhi, being attached to the Provincial Divisions at each place for purposes of routine, accounts, &c.

"If a sum of say Rs. 10,000 can be found by the Bombay Government, I can furnish an equal sum out of my grant for the current year, and will do my best to assist the Bombay Government to find an Engineer of suitable qualifications.

"One or two buildings should, I think, be put in hand at Ahmedabad, and as it is connected by railway with Bijapur, the officer in charge of the sub-division could carry on work at both places. He should be directly under my orders in respect of the technicality of his work, and be attached to the Ahmedabad and Bijapur Divisions for routine matters of expenditure and account.

"His first duty should be to prepare estimates in communication with me, and he should first take in hand the following buildings:—

Tomb of Mahmud	Bijapur.
Syad Usman's Tomb and Mosque	} Ahmedabad.
Ahmed Shah's Tomb	

"I hope that the course suggested will meet with the favourable consideration of His Excellency the Governor in Council, and that I may receive an early intimation of the decision arrived at, to permit of my providing funds from the Budget Grant of my Department."

13. After despatching the previous letter, the following Resolution reached me

Resolution of the Bombay Government on repairs at Ahmedabad.

Archæological Remains, Ahmedabad, No. 1607, dated Bombay Castle, 15th May 1883.

Letter from the Collector of Ahmedabad, No. 1209, dated 3rd May 1883, forwarding, with reference to Government Resolutions Nos. 3048 and 1783, dated respectively 22nd November 1881 and 15th May 1882, a report on the archæological and architectural remains in Ahmedabad; and observing that the appointment of a Curator, as recommended in paragraph 4 of Captain Cole's report No. 174, dated 24th April 1882, would be most advisable, but that there is no chance of the persons concerned with the mosques, contributing to the expenses of his pay.

RESOLUTION.—A copy of the Collector's letter and of its accompaniment should be forwarded to the Curator of Ancient Monuments in India, with reference to paragraph 2 of Government Resolution No. 1783, dated 15th May 1882.

14. The following inspection note on Bassein was forwarded by me to the Bombay Government on the 9th June 1883:—

Bassein.

Note on the condition of the Buildings in the Portuguese Fort of Bassein, Bombay.

"My visit to Bassein took place on the 11th November 1882. The Fort is reached from the Bassein road station, on the Bombay, Baroda and Central India Railway, and is about 5 miles distant. It was built in 1535 A.D. by Nuno-da-Cunha, and is in the form of an irregular decagon, the circumference being a mile and a half. It is close to the sea, and has a sea-gate and a land-gate. Near the sea-gate is the Cathedral of St. Joseph rebuilt in A.D. 1661. It is in the style of mediæval architecture of Southern Europe, and has a tower; but the whole structure is greatly ruined and surrounded, and overgrown by pipal trees and elephant creepers. Dangerous portions of the buildings should be taken down, trees and vegetation removed, and the security of all inscribed stones assured. There is a tombstone in the body of the church, dated A.D. 1618, which ought also to be preserved.

"An inscription, dated 1536, is mentioned in the history and antiquities of Bassein by J. Gerson da Cunha, page 217, as being on a wall of a bastion of the fort. It records the building of the fort, and should be rendered accessible and preserved.

"The chapel of the Misericórdia should be cleared of vegetation.

"The church of N. S. da Vida as well as another church were converted into warehouses, in connection with a sugar refinery, now abandoned, and the rusted machinery, disused vats, &c., are very unsightly objects in the vicinity.

"The church and monastery of the Jesuits, dated 1548, should as far as possible be preserved by clearing away trees from the cloisters, and by strengthening the masonry of the principal façade. The ruins of the Franciscan church and monastery should also be cleared out, and the numerous tombstones with their various inscriptions preserved.

"Here and there in the walls of the fort are to be seen pieces of sculptured stone, which no doubt in former years belonged to Hindu buildings.

"Within the fort walls is the residence of Major Littlewood, who cultivated the open areas and who built the unsightly sugar refinery works."

- 15 On the 27th of June 1883 I addressed the following inspection note on Bijāpur to the Bombay Public Works Department:—

Bijāpur.

Note on Buildings at Bijāpur.

"I visited Bijāpur in March 1883, and went over the buildings in the city on the 19th of the month. The new line connecting it with the Great Indian Peninsula Railway at Hudge was complete, although not yet open for traffic, and I had the advantage of travelling to and fro on the engine of a material train.

"There can be no doubt that Bijāpur will become much more frequented as soon as the line is open. The railway station is quite close to Mahmud's Tomb, and an estimate for converting the small adjacent mosque into a Travellers' Bungalow was sanctioned at the end of last year by the Bombay Government.

"2. I have several times protested against this arrangement as being vandalistic, and one of the principal objects of my visit was to see how far the alterations would affect the building, which is a handsome specimen of architecture.

"3. The accompanying plan, copied from that which was sanctioned, shows how the interior is partitioned off into four sets of rooms; also the latrines and bath-rooms that have been built on to the exterior walls. Two of these excrescences flank the central chapel or *mehrab*, and to communicate with them a doorway has been opened out through the very sanctuary of the building.

"4. The interior effect of the ranges of arches is entirely spoilt by the partitions, but the walls are carried up only a few feet, so that the four sets of travellers would either have to be noisier, or else abandon all privacy.

"5. Cut up thus into small chambers the building cannot help being unbearably hot. There is no thorough ventilation in the lower parts of the rooms, and nothing will prevent the upper parts from invasion by bees, bats, or birds.

"6. The accompanying sketches taken from photographs by Mr. Reinold, the Executive Engineer, show the east façade of the building towards Mahmud's Tomb. There is a remarkably handsome range of sculptured stone brackets supporting the eave or *chujja* at the roof-line; and the central dome and flanking minarets are good examples of their class, the

whole being most agreeably harmonious, but the effect is marred when the eye catches the white-washed partitions of the interior and the bath-room excrescences.

"7. A much more suitable building for travellers is the Nakarkhanah shown in the smaller of the two sketches. It is in fact now used as a rest-house by the Railway Officers, the lower part being used by servants, and the upper floor for sitting and bedrooms. I can speak from personal experience on the occasion of my visit, but was told that there is always a pleasant breeze through the upper rooms, which are raised high above the ground and are therefore very pleasantly cool. The Nakarkhanah, although part of the original design of the whole group of buildings, is quite plain, with no pretensions to architectural beauty, and its permanent conversion into a rest-house is far less objectionable from an architectural point of view, and is much more expedient if the comfort of travellers is to be considered.

"8. The following estimates which I had previously seen were sanctioned by the Bombay Government on the 23rd December 1—

	Rs.
Gagan Mahal	1,676
Mehar Mahal	1,565
Mecca Masjid	829

Nothing had been done to the two first buildings, but I regret to say that the repairs to the Mecca Masjid were made to include applications of white-wash to the work, which mars the whole flavor of the well-intentioned remedies.

"9. The Executive Engineer at Bijapur is now busily engaged in converting a number of buildings in the citadel into offices and dwellings for the Kaladgi District Officers, and his time is fully occupied. Two years ago I submitted a report on the Bijapur project (see page CXLI of the Annual Report for 1881-82), but special repairs to the architectural buildings were not sanctioned when the project was finally passed.

"10. The experience gained in other parts of India shows that architectural repairs can only be properly done by an officer who devotes his whole time to the work. Bad repairs are worse than neglect. I have therefore recently recommended the Bombay Government to create a special sub-division for conserving ancient monuments in the Presidency. (*Pide* letter No. 73, dated 21st May 1883.)"

Appendix F.

Reports and correspondence concerning Ancient Monuments in Bengal.

1. As already pointed out in Appendix Q of the Annual Report for 1881-82, General measures in Bengal. page clvi, Sir Ashley Eden, when Lieutenant-Governor of Bengal, employed Mr. Beglar (late Assistant to Major-General Cunningham) to conduct repairs to the great Buddhist temple at Buddha Gaya. Mr. Beglar has since then been engaged at Sasaram, and has roughly shaped some repair estimates for Rohtasgarh in the neighbourhood of Sasaram.

2. Buddha Gaya having been commenced before my appointment, under the advice and direction of General Cunningham, I asked Sir Ashley Eden, who invited me to inspect the work, to let the operations proceed as projected. I visited Buddha Gaya, however, on the 7th March 1882, and submitted some general recommendations to the Bengal Government on the subject of completing a set of illustrations of the temple showing its various stages of repair, and urged the provision of permanent custody for the buildings. I also advocated the disposal of the many hundred duplicate specimens of small votive totes and stone fragments among the various provincial museums in India. (See page clvi of the Annual Report for 1881-82.)

3. Since then I have been in frequent correspondence with the Bengal Government on the subject of Mr. Beglar's repairs to Shih Shah's Tomb. Shih Shah's Tomb, a Pathan building of importance at Sasaram, 60 miles south of Arrah. An estimate had been prepared by Mr. Beglar amounting to Rs. 50,608, but not, as is usual in such cases, in consultation with me. Being anxious to know how this amount was to be expended on the building, I asked the Bengal Public Works Department to allow me to see the estimates and received the following letter from the Secretary:—

"I am directed to forward herewith for your inspection Mr. Beglar's estimate of the cost of thoroughly repairing Shih Shah's Tomb at Sasaram, and to inform you that orders were issued last January authorising Mr. Beglar to put in hand such urgent repairs as were immediately necessary to prevent further deterioration of the edifice, and a sum of Rs. 5,000 was placed at his disposal for the purpose. It was intended to sanction subsequently the more important items of the estimate (enclosed herewith), but to limit the expenditure on the work to about Rs. 50,000.

"When the financial arrangements of the current official year came to be revised, however, it was found that the necessary demand for works in progress precluded the possibility of carrying out this intention, and Mr. Beglar is therefore still limited to the execution of the urgent repairs which he originally undertook. These are as follow:—

Repairs to dome	Rs. 3,110	Item 7 of estimate	
Scaffolding for "	" 2,500	" 8	"
Repairs to plinth	" 1,884	" 2	" in part.
Do. to basement	" 3,740	" 3	" do.

TOTAL . . . 11,240

The remainder of the work provided for in the estimate must stand over for the present, and this is the more unfortunate that probably when the time comes for resuming and completing the work, Mr. Beglar's services may not be available for the supervision of it. Under these circumstances, I am to state, it will be an advantage if you can assign any portion of the funds placed at your disposal by the Government of India for the conservation of ancient monuments, and enable Mr. Beglar to complete such other items of the estimate as you think should be carried out at once.

"I am to request that the estimate may be returned at your early convenience."

4. I subsequently assigned a sum of Rs. 5,000 out of the funds placed at my disposal by the Government of India for 1882-83, and, as requested, mentioned the items which seemed to me best to carry out for this amount.

Inspection note on Shir Shah's Tomb.

5. After visiting Sasaram I submitted the following inspection note:—

"I visited Sasaram with Mr. Beglar, Executive Engineer, Ancient Monuments, Bengal, and inspected his work at Shir Shah's Tomb on the 7th March last.

"The first thing that strikes me is the very unsatisfactory condition of the causeway leading to the tomb, which stands in the centre of a large square tank.

"The accompanying sketch shows the two fractured ends of the old causeway or bridge and the renovated approach, which is a low earthen embankment, with a small masonry bridge in the centre."

"Nothing could be more inconvenient and inharmonious than this arrangement. If it is desirable to reach the tomb at all, it is surely undesirable to descend in order that one may ascend. The old causeway harmonised with the architecture of the tomb, and had arches of the Pathan pattern, and it is surely inconsistent to place at the very threshold of the edifice anything so out of keeping as the prim little masonry bridge represented in the accompanying sketch. I hope a fresh estimate will be ordered for reproducing the old lines of the causeway.

"The next feature which arrests the eye is the kiosque crowning the dome of the tomb. There can be no doubt that this is a modern feature in the building. The adjacent tomb of Shir Shah's father, Husain Khan, has a pinnacle or finial, which mode of terminating a dome is the invariable feature in all Pathan tombs, and is also used in the Kila-kona Masjid at Delhi, the finest of all the buildings of Shir Shah's time.

"So convinced do I feel that the present kiosque is a modern addition, that I advised Mr. Beglar to remove it, and to replace it by a finial, on the pattern of that in the central dome of the tomb of Shir Shah's father, Husain Khan. (See accompanying sketch.)

"Mr. Beglar's original estimate of Shir Shah's tomb included repairs to the outer gateway and the approach. Of this, Rs. 11,153 were given by the Bengal Government, supplemented by Rs. 5,000 out of my grant.

"First and foremost, I think the plaster repairs are too conspicuous. The dome which has been completely recovered is most glaringly white. The colour of the plaster should have matched the masonry of the body of the structure. I noticed the re-pointing in the masonry of the plinth to be too heavy, and the plaster used in the parapet walls is, in my opinion, unnecessarily liberal. I mentioned these points to Mr. Beglar, and asked that the colour of all the plaster work might be toned down to match the stone colour of the whole mass of building.

"The interior of the tomb, which is very fine and impressive, is lighted by a series of window openings above the verandah. These used to be filled by tracery, and should be so refilled. The effect would thus gain immensely at a trifling cost.

"The various carved enrichments which adorn both the exterior and interior of the building want clearing. Many of them are of good design and worth illustration, but at present dirt, &c., renders them unattractive.

"Surrounding the verandah of the tomb like a bold cornice is a chujja or eave. In many parts broken, it gives a ruined appearance to the building. Its restoration would not only improve the effect, but keep rain off the walls.

"All traces of coloured tile decoration should be carefully preserved.

"A gateway erected on the west side of the great tank should receive petty repairs.

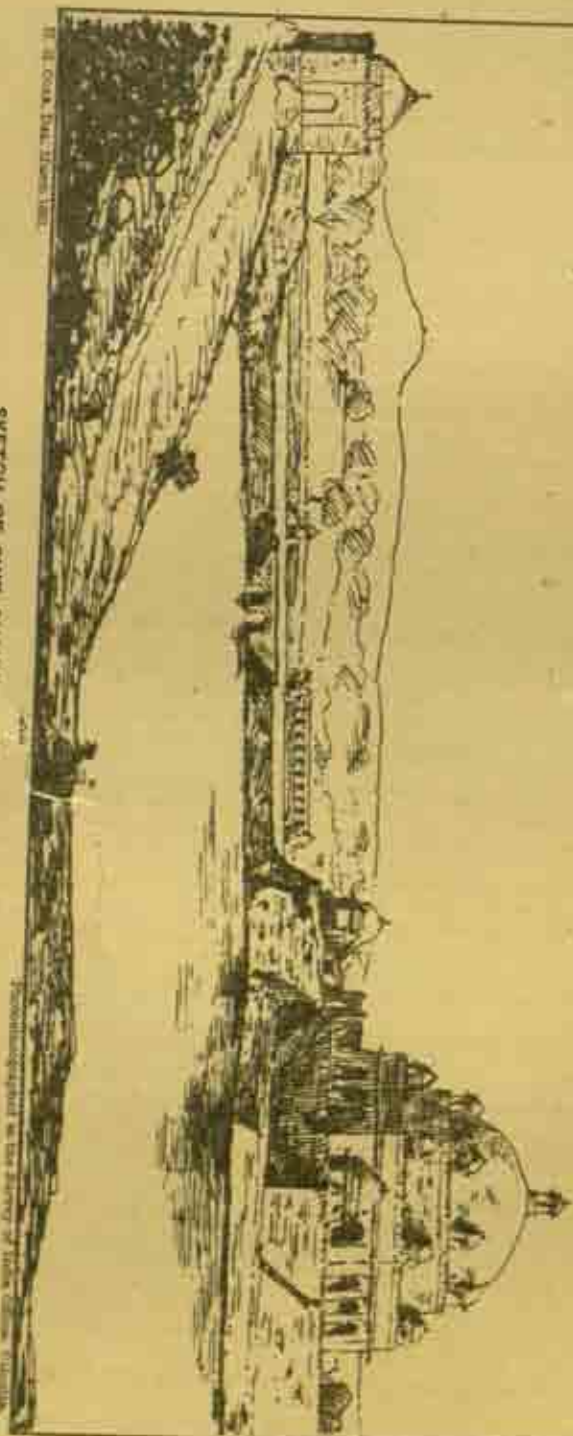
"The earth excavated to form the great tank was banked up all round its four sides, and to a great measure dwarfs and conceals the tomb. It would be a great advantage to distribute the earth over the surrounding fields.

"The tomb of Husain Khan to the east of the great tank is a building of considerable merit. The sketch gives a general idea of its outline and massive proportions. The interior has a good deal of coloured decoration and incised plaster ornament, and there is some tile-work outside. All of these are well worth recording by illustration. The building should be cleared out and receive necessary repairs to the roof and domes. The fallen eaves or chujjas should be renewed both for protecting the walls and for appearance sake."

* Mr. Beglar provided for restoring the old bridge, but the work was taken out of his hands and executed by the Civil Department.

11-12 COOK, DEL. 1850.

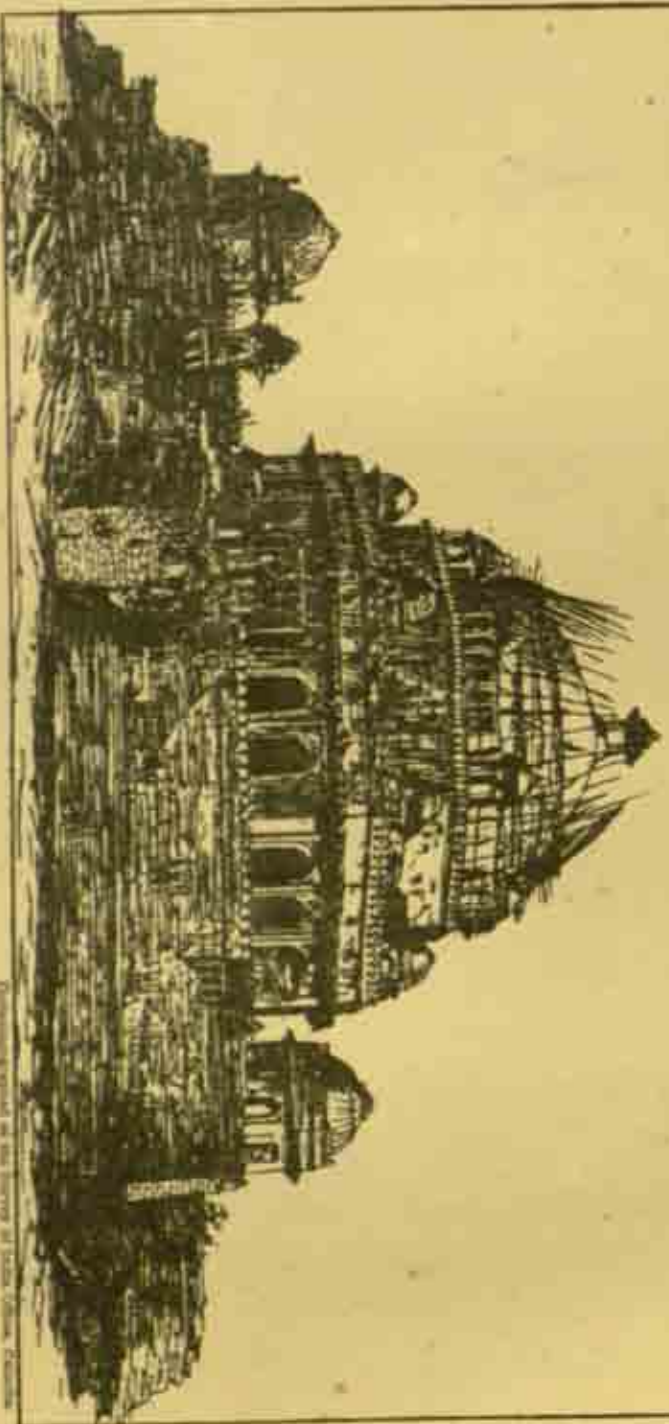
Photographed in the Survey of India, Calcutta.



SKETCH OF SHIR SHAH,
SHOWING THE PRESENT ST.

MB AT SAGARAM, BENGAL.
THE CAUSEWAY ACROSS THE TANK.





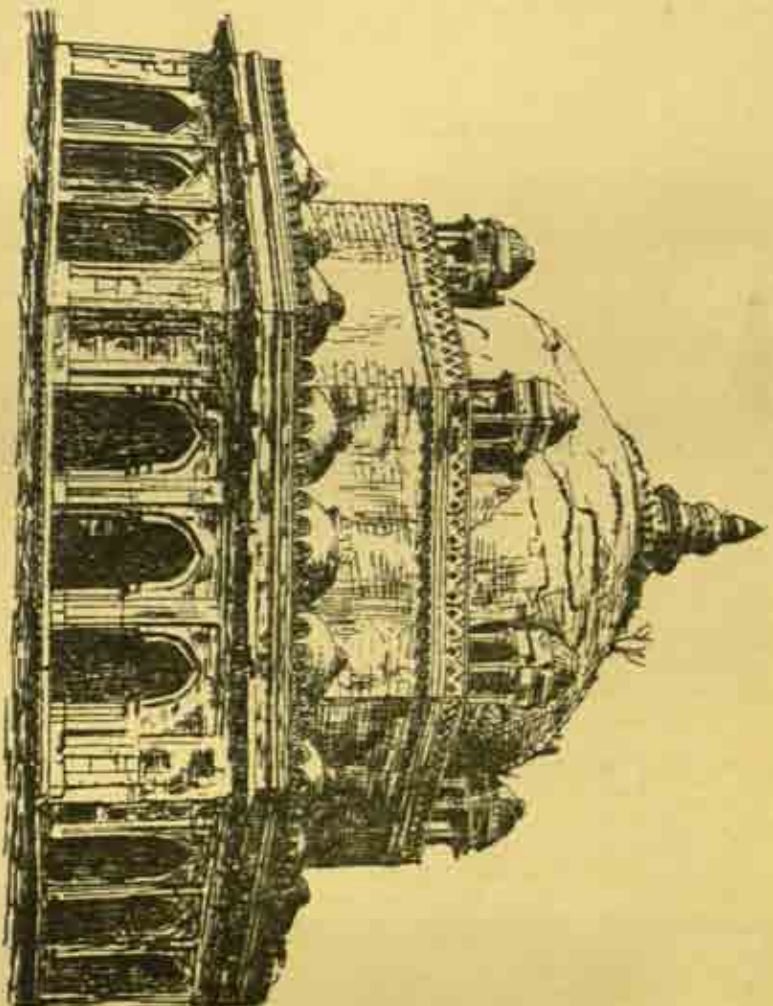
Engraving by A. J. Fisher

SHIH SHAH'S TOMB, SASARAM.

Engraving by A. J. Fisher

Engraving by A. J. Fisher





THE TOMB OF HUSAIN KHAN, AT SASARAM.

TOMB OF HUSAIN KHAN, FATHER OF SHIR SHAH, AT SASARAM.

Illustration of the Tomb of Husain Khan, at Sasaram, Bihar.

Appendix G.

Reports and correspondence, &c., concerning ancient monuments in Central India.

On the 14th of October 1882 Major Keith was appointed temporarily to be my Assistant for Central India. He had been engaged during the early part of the year, under the Agent to the Governor-General, on repairs to the temples and palace buildings in Fortress Gwalior, also in collecting carved pillars and isolated sculptures round the great Teli-ka-Mandir.

2. I gave Major Keith the following instructions on the 26th October 1882:—

"A sum of Rs. 20,000 will be allotted by the Government of India this year for repairs to the Sanchi Tope and for work at Mandu. The accompanying report shows what are the works that you are to undertake: and as any unspent portion of the Rs. 20,000 will lapse on the 31st March next, it is important that you should get to work as soon as possible.

"You should proceed in the first instance, and with as little delay as possible, to Sanchi to re-erect the western and southern gateways and complete the repairs to the surface masonry of the Great Tope."

"Colonel Thomason, R.E., at Indore, has kindly promised to send an engineer for a time to assist you in the rebuilding of the fallen gates, and you should therefore go to Indore on your way to Sanchi in order to confer with him, and to ascertain what material, &c., he could send you."

The heaviest weight to be lifted will be under 5 tons. You will require three differential pulleys, each capable of lifting such a weight, good strong rope, 1 inch and 1 inch iron bars for connecting pieces of stone; a small furnace, lead solder, blacksmith's tools, mason's tools, modelling tools for cleaning the carvings, a garden pump, Portland cement, and lime mortar. Bamboos and country rope can be procured at Bhopal. The cost of material, tools, &c., salary of temporary establishment, including the pay of the engineer lent by Colonel Thomason, carriage, labour, travelling expenses, and your own salary to 31st March, will all be charges against the Rs. 20,000 grant. The materials that you must procure on loan from Colonel Thomason or Mr. Geoghegan must, of course, be purchased again in February. I shall visit Sanchi early in December next, and will go to Mandu."

"On the completion of the Sanchi work, I will send a photographer to take photographs of the tope and gateways as restored, and these illustrations, together with the photographs already taken, may form a monograph on the works of conservation at Sanchi."

3. After personally inspecting the Sanchi buildings in December 1882 and seeing the result of the work conducted by Mr. Mears, who had been employed the previous year by the Central Agent, Bhopal, in filling the breach in the Tope and clearing jungle from the buildings, I found it necessary to somewhat modify the first instructions, and on the 13th December addressed the following to Major Keith:—

"Your attention is directed to the following points in respect of the work at Sanchi:—

"The first works to be attended to are:—The re-erection of the fallen gateways, *i.e.*, the western and southern gates of the Great Tope, and repair to the small gateway close by. Arrangements for these should take precedence of all other work. If you find that a heavy timber scaffold cannot be provided here in Bhopal, it will be necessary to get the loan of iron rails from Mr. Geoghegan, and to arrange at once for their carriage to Sanchi. This will be somewhat costly and take time. A certain amount of quarrying will have to be done on the Sanchi Hill to supply missing portions of the gates, &c., and you should in

Revised instructions.

"The first works to be attended to are:—The re-erection of the fallen gateways, *i.e.*, the western and southern gates of the Great Tope, and repair to the small gateway close by. Arrangements for these should take precedence of all other work. If you find that a heavy timber scaffold cannot be provided here in Bhopal, it will be necessary to get the loan of iron rails from Mr. Geoghegan, and to arrange at once for their carriage to Sanchi. This will be somewhat costly and take time. A certain amount of quarrying will have to be done on the Sanchi Hill to supply missing portions of the gates, &c., and you should in

6. I had previously received, through the Government of India, a copy of a report and rough estimate framed by Mr. Beglar for repairs to the palace buildings at Rohtasgarh near Sasaram, and took occasion to confer with Mr. Beglar

on the subject.

7. Having the conviction that the best monuments of *their class* in Bengal should be taken up first, I addressed a letter to the Bengal Government in the Public Works Department (No. 47, dated 26th April 1883), from which the following paragraphs are here quoted:—

"The questions in any administrative area are primarily—what are the best and most singular national monuments? what is the least that should be done to prolong their existence? and by what means is the work to be carried out in any reasonable time? It will certainly be necessary to establish the Ancient Monuments Division for a term of at least three or four years; without this, conservation in Bengal will not have been even seriously attempted.

"I have drawn up a rough map of Bengal showing some of the principal ancient monuments in the Presidency. A survey should be made of these, and the remedies indispensable in each case can then be agreed on."

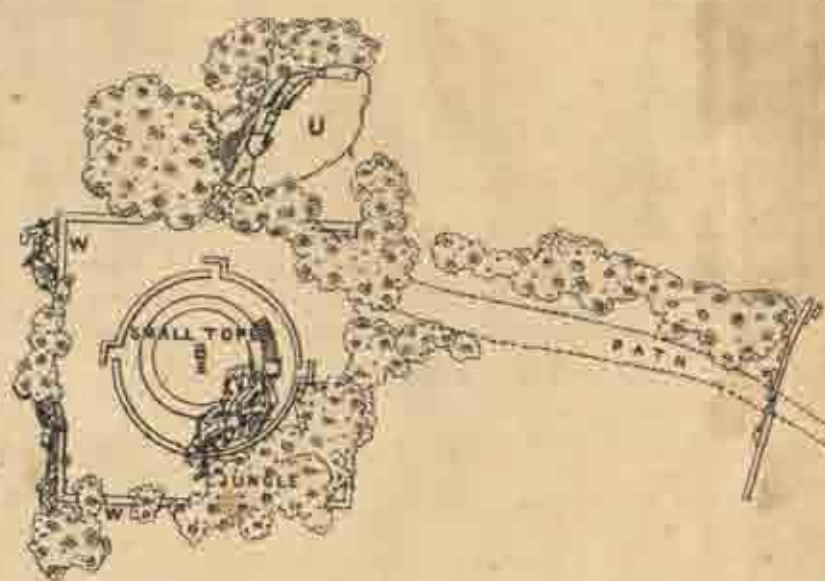
"Mr. Beglar's report on Rohtasgarh, together with a rough estimate, has been sent to me for opinion. A grant of Rs. 10,000 is asked to meet the cost of the repairs of certain structures. To this I can but say that the work seems in itself desirable, but, as there are better examples of Man Singh's buildings in Fortress Gwalior, to which repairs have commenced, I put the Gaur ruins before Rohtasgarh in degree of national importance."

"The brick and terra-cotta buildings of Bengal, of which the Gaur and Panduah Mosque, &c., are singularly good examples, possess an importance for the whole of India. Buildings of this class were erected in localities where stone was scarce, and a revived knowledge of how brick and terra-cotta were employed would be of practical utility."

8. To this letter I have as yet received no answer, but it seems to me the inconsistencies will be inevitable unless general principles applicable to the whole of India are followed in the selection of monuments to be repaired and in the remedies to be applied.

Application of general principles necessary.

GENERAL PLAN
OF THE
RUINS AT SANCHI-KANAKHERA, BHOPAL,
IN
CENTRAL INDIA
Shewing the condition of the Monuments
in 1880-81.



REFERENCE TO PLAN.

- | | | |
|---|--|-------------------------|
| A. Large Shrine on Tope. | 32. Group of four (centre figure headless). | 33. Fragment of No. 32. |
| B. Small shrine. | 33. Large bell-shaped carved stone with a | 34. Same as No. 32. |
| C. Stone Column or Bowl. | of Buddha carved on one side (13 yds | 35. Same as No. 32. |
| D. Remains of stone stupas. | high). | 36. Same as No. 32. |
| E. Group of small shrines. | 34. Pillars from bracket of Gateway. | 37. Same as No. 32. |
| F. Small sculptured Gateway. | 35. Figure of elephant (legs and proboscis | 38. Same as No. 32. |
| G. Remains of the terrace M. | broken off). | 39. Same as No. 32. |
| H. Base of a fallen pillar. | 36. Fragment of dancing woman. | 40. Same as No. 32. |
| I. J. K. L. Other isolated pillars. | 37. Figure of elephant (head and legs broken | 41. Same as No. 32. |
| M. Vihara with side cells. | off). | 42. Same as No. 32. |
| N. Chhatra (umbrella). | 38. Capital of small column. | 43. Same as No. 32. |
| O. Pillar. | 39. Figure of a Naga King (headless). | 44. Same as No. 32. |
| P. Chhatra Hall. | 40. Head of above. | 45. Same as No. 32. |
| Q. Temple. | 41. Fragment of toothed wheel. | 46. Same as No. 32. |
| R. Sculptured entrance pier of G. (fallen). | 42. Fragment of hemispherical (see | 47. Same as No. 32. |
| S. Old Tope. | 43. Capital of small column. | 48. Same as No. 32. |
| T. Supporting wall of Eastern Terrace. | 44. Colossal figure of Buddha. | 49. Same as No. 32. |
| W. W. W. Masonry wall (ruins). | 45. Architectural image carved on surface | 50. Same as No. 32. |
| Southern Gateway. | (image partly broken). | 51. Same as No. 32. |
| A.S.C. or Eastern Gateway. | 46. Base of square column. | 52. Same as No. 32. |
| Western Gateway. | 47. Square column. | 53. Same as No. 32. |
| Small sculptured Gateway. | 48. Do. | 54. Same as No. 32. |
| I. H. III. or Eastern Gateway. | 49. Same as No. 32. | 55. Same as No. 32. |
| Other detached sculptures numbered on plan | 50. Fragment of square column. | 56. Same as No. 32. |
| from 1 to 147. | 51. Same as No. 32. | 57. Same as No. 32. |
| 1. Colossal figure of Buddha. | 52. Same as No. 32. | 58. Same as No. 32. |
| 2. Figure of a Naga. | 53. Same as No. 32. | 59. Same as No. 32. |
| 3. Fragment of small figure (head only). | 54. Same as No. 32. | 60. Same as No. 32. |
| 4. Bell-shaped carved stone. | 55. Same as No. 32. | 61. Same as No. 32. |
| 5. Naga King. | 56. Same as No. 32. | 62. Same as No. 32. |
| 6. Same as No. 5. | 57. Same as No. 32. | 63. Same as No. 32. |
| 7. Same as No. 5. | 58. Same as No. 32. | 64. Same as No. 32. |
| 8. Head of a standing figure (small only). | 59. Same as No. 32. | 65. Same as No. 32. |
| 9. Same as No. 8. | 60. Same as No. 32. | 66. Same as No. 32. |
| 10. Lion capital, small one (headless). | 61. Same as No. 32. | 67. Same as No. 32. |
| 11. Lion capital supported on four lions (only | 62. Same as No. 32. | 68. Same as No. 32. |
| centre of Chhatra or wheel remaining). | 63. Same as No. 32. | 69. Same as No. 32. |
| 12. Fragment of image. | 64. Same as No. 32. | 70. Same as No. 32. |
| 13. Head of column. | 65. Same as No. 32. | 71. Same as No. 32. |
| 14. Do. | 66. Same as No. 32. | 72. Same as No. 32. |
| 15. Do. | 67. Same as No. 32. | 73. Same as No. 32. |
| 16. Winged lion (legs broken off). | 68. Same as No. 32. | 74. Same as No. 32. |
| 17. Same as No. 16. | 69. Same as No. 32. | 75. Same as No. 32. |
| 18. Winged lion (trunk only). | 70. Same as No. 32. | 76. Same as No. 32. |
| 19. Column. | 71. Same as No. 32. | 77. Same as No. 32. |
| 20. Figure of Buddha (trunk only). | 72. Same as No. 32. | 78. Same as No. 32. |
| 21. Same as No. 20. | 73. Same as No. 32. | 79. Same as No. 32. |
| 22. Do. | 74. Same as No. 32. | 80. Same as No. 32. |
| 23. Do. | 75. Same as No. 32. | 81. Same as No. 32. |
| 24. Do. | 76. Same as No. 32. | 82. Same as No. 32. |
| 25. Small statue of Buddha (trunk only). | 77. Same as No. 32. | 83. Same as No. 32. |
| 26. Head of Buddha. | 78. Same as No. 32. | 84. Same as No. 32. |
| 27. Group of three figures (fragment). | 79. Same as No. 32. | 85. Same as No. 32. |
| 28. Lion capital (small one remaining). | 80. Same as No. 32. | 86. Same as No. 32. |
| 29. Group of three figures (small one remaining). | 81. Same as No. 32. | 87. Same as No. 32. |
| | 82. Same as No. 32. | 88. Same as No. 32. |
| | 83. Same as No. 32. | 89. Same as No. 32. |
| | 84. Same as No. 32. | 90. Same as No. 32. |
| | 85. Same as No. 32. | 91. Same as No. 32. |
| | 86. Same as No. 32. | 92. Same as No. 32. |
| | 87. Same as No. 32. | 93. Same as No. 32. |
| | 88. Same as No. 32. | 94. Same as No. 32. |
| | 89. Same as No. 32. | 95. Same as No. 32. |
| | 90. Same as No. 32. | 96. Same as No. 32. |
| | 91. Same as No. 32. | 97. Same as No. 32. |
| | 92. Same as No. 32. | 98. Same as No. 32. |
| | 93. Same as No. 32. | 99. Same as No. 32. |
| | 94. Same as No. 32. | 100. Same as No. 32. |
| | 95. Same as No. 32. | 101. Same as No. 32. |
| | 96. Same as No. 32. | 102. Same as No. 32. |
| | 97. Same as No. 32. | 103. Same as No. 32. |
| | 98. Same as No. 32. | 104. Same as No. 32. |
| | 99. Same as No. 32. | 105. Same as No. 32. |
| | 100. Same as No. 32. | 106. Same as No. 32. |
| | 101. Same as No. 32. | 107. Same as No. 32. |
| | 102. Same as No. 32. | 108. Same as No. 32. |
| | 103. Same as No. 32. | 109. Same as No. 32. |
| | 104. Same as No. 32. | 110. Same as No. 32. |
| | 105. Same as No. 32. | 111. Same as No. 32. |
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| | 108. Same as No. 32. | 114. Same as No. 32. |
| | 109. Same as No. 32. | 115. Same as No. 32. |
| | 110. Same as No. 32. | 116. Same as No. 32. |
| | 111. Same as No. 32. | 117. Same as No. 32. |
| | 112. Same as No. 32. | 118. Same as No. 32. |
| | 113. Same as No. 32. | 119. Same as No. 32. |
| | 114. Same as No. 32. | 120. Same as No. 32. |
| | 115. Same as No. 32. | 121. Same as No. 32. |
| | 116. Same as No. 32. | 122. Same as No. 32. |
| | 117. Same as No. 32. | 123. Same as No. 32. |
| | 118. Same as No. 32. | 124. Same as No. 32. |
| | 119. Same as No. 32. | 125. Same as No. 32. |
| | 120. Same as No. 32. | 126. Same as No. 32. |
| | 121. Same as No. 32. | 127. Same as No. 32. |
| | 122. Same as No. 32. | 128. Same as No. 32. |
| | 123. Same as No. 32. | 129. Same as No. 32. |
| | 124. Same as No. 32. | 130. Same as No. 32. |
| | 125. Same as No. 32. | 131. Same as No. 32. |
| | 126. Same as No. 32. | 132. Same as No. 32. |
| | 127. Same as No. 32. | 133. Same as No. 32. |
| | 128. Same as No. 32. | 134. Same as No. 32. |
| | 129. Same as No. 32. | 135. Same as No. 32. |
| | 130. Same as No. 32. | 136. Same as No. 32. |
| | 131. Same as No. 32. | 137. Same as No. 32. |
| | 132. Same as No. 32. | 138. Same as No. 32. |
| | 133. Same as No. 32. | 139. Same as No. 32. |
| | 134. Same as No. 32. | 140. Same as No. 32. |
| | 135. Same as No. 32. | 141. Same as No. 32. |
| | 136. Same as No. 32. | 142. Same as No. 32. |
| | 137. Same as No. 32. | 143. Same as No. 32. |
| | 138. Same as No. 32. | 144. Same as No. 32. |
| | 139. Same as No. 32. | 145. Same as No. 32. |
| | 140. Same as No. 32. | 146. Same as No. 32. |
| | 141. Same as No. 32. | 147. Same as No. 32. |
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| | 146. Same as No. 32. | |
| | 147. Same as No. 32. | |





consultation with Mr. John Lewis, the subordinate placed at my disposal, make out a complete list of all tools and plant which you will require; and take immediate steps for obtaining them on loan from the railway contractor or from the Durbar, or else by purchasing them.

"I am disposed to postpone doing anything to the surface of the great hemispherical dome of the top; the renovated portion shows signs of settling down, and during this, painting the masonry joints would be useless. Moreover, the dome was originally plastered over, as may be seen in certain parts; and after the railing has been replaced on the summit, it will be time to consider what is best to be done with the dome surface.

"The upper railing and lee of the top should, as far as possible be, re-erected.

"An approach path should be made up the side of the hill, and steps cut in the rock where necessary. The causeway to the small top on the west should also be improved by cutting steps, &c.

A good deal remains to be done in jungle clearing, and all the buildings and remains on the hill should be completely freed from creepers and trees. The tree near the northern gateway of the great top should be felled in several pieces, and for this you will want some large saws and axes.

"Mischievous chipping of carvings still goes on and can only be prevented by erecting a wall all around the area covered by buildings; but as there is abundance of stone available on the hill, it will not be difficult to make a 7-foot dry masonry wall to surround the Great Top and the adjoining Chattri Temple and Vihara. The small top to the west should also be so protected, and gates under lock and key be provided at each place, so that the straying of cattle and trespass by idlers and mischievous persons may be prevented. The head man of Sanchi Nanakhura should have charge of the keys and be held responsible.

"I think a good deal may be done to the railing round the Great Top by straightening the piers and holding them erect by iron bars let into the plinth of the top.

"A recent earthquake has caused a serious crack right across the bottom of the right pier of the northern gateway. Fortunately the crack is nearly in a horizontal plane, but it would, I think, be well to tie the top of the two piers of the gate by iron bars to the top itself, and thus lessen the danger of falling backwards or forwards should Sanchi be again visited by an earthquake.

"The space between the railing and top is paved with large radiating slabs of stone which should be laid bare, and the covering earth all removed. The Buddhist figures should, as far as possible, be replaced in their positions opposite the gateways. The steps recently built to the top of the plinth have a number of carved stones which belong to the upper railing perhaps and which should be removed. Fergusson's and Cunningham's illustrations show a double flight of stairs at the south gate, and these stairs should be restored.

"The small top to the west might hereafter be repaired by filling in the hole and repairing the dome.

"The sculptures of the gateways of the Great Top and of the small gateway near, also of the railing of the small top to the west, should be thoroughly cleaned.

"All carved fragments, the original position of which cannot be identified, should be carefully collected together.

"The work of re-erecting the gateways is of paramount importance; but I hope you will find time to visit the topes in the neighbourhood at Andher, Bhupur, Somari, and Satharna."

4. I again visited Sanchi on the 12th, 14th March, and was most satisfied with what had been done. Major Keith's health had unfortunately prevented his reaching the scene of operations until December, but the progress made.

Inspection of Sanchi
(March).

I must say, under difficulties of no common kind, during the months of January and February seemed to me most creditable to Major Keith and to Mr. Lewis, the Engineer placed at my disposal by Colonel Thomason.

5. The accompanying plan shows the condition of the Buddhist remains in January 1881. Since then Mr. Mears partially cleared away the trees and vegetation which had overgrown the various structures. He also filled in the breach in the Great Top. Although a step in the right direction a great deal remained to be done, and when

Plan of the Sanchi Hill.

Partial clearing of trees and filling the breach in top
1881-82.

I saw the place in December last; the ground was still strewn with fragments of the railing and tee which surmounted the great mound, with huge blocks of the fallen southern and western gates, and with carvings of all kinds belonging to the four Buddhistic shrines that occupied positions against the plinth of the tope opposite the four gateways. The plan is an accurate record of the position and nature of the fragments that surrounded the various monuments on the hill. It will be observed that the tope and railings are elliptical in plan and not circular as hitherto represented.

6. By March, a complete transformation had taken place. The whole of the jungle had been removed from the Great Tope.

Progress in March 1883.

Great Tope.

The ground round it had been partially cleared and sloped so as to prevent water lodging. The processional path between the railing and plinth of the mound had been partly freed of debris and earth, the stone pavement laid bare, and several fragments of sculpture were recovered during the process of clearing. The figures of Buddha were in process of re-erection in their respective places against the plinth of the tope opposite each of the four gateways. The great Asoka railing had fallen between the north and west gates, between the west and south gates, and at the east entrance, and was shaky in many other places. The whole had been straightened and securely tied by iron bars, across the circular processional path, to the masonry of the tope.

North gate.

East gate.

South and west gates.

Small gate.

The northern gate rendered dangerous by the crack across the lower part of one of its uprights had been secured in the same way by iron bars to the tope. The eastern gateway had been similarly secured. The southern and western gateways were in process of re-erection. The smaller gateway of the tope to the north had been completely rebuilt. In supplying missing portions of the gateways that were re-erected, plain stone was used, any reproduction of carvings must have been imaginative and wholly misleading. The sculptures on the northern gateway and gateway of the small tope had been thoroughly cleaned, greatly to their advantage. Each bas-relief has become as sharp and clear as when first chiselled.

Owing to the eradication of jungle, the outline and position of the various surrounding topes, temples, Chaitya Hall, Vihara, and walls of the monastic buildings are now evident. The approach road on the north side of the hill has been opened out and restored, and the ancient causeway leading from the small tope B2 on the west has been improved and stepped. The retaining wall to the east of the Great Tope had been partially rebuilt, and the temples, Chaitya Hall and Vihara cleared of debris. Two large statues of Porters or "Gwapsals" found in clearing the ground had been erected to the north of the Great Tope.

7. The heavy part of the work is done, but the following remains to be finished:—

Work remaining.

GREAT TOPE.

- (1.) Complete the sloping off of the ground.
- (2.) Completely eradicate all roots of trees or creepers.
- (3.) Rebuild the plinth which bulges dangerously near the south gate.
- (4.) Secure the surface masonry of the tope by filling in the joints and pointing.
- (5.) Rebuild the railing on the summit of the mound.
- (6.) Complete cleaning of all sculptures.

SMALL TOPE B2.

- (7.) Fill in the breach in the mound.
- (8.) Secure surface masonry of the mound.
- (9.) Clear ground of rubbish and trees.
- (10.) Secure railings.
- (11.) Clean up processional path.
- (12.) Clean all carvings.
- (13.) Wall round the small tope.

GENERAL.

- (14.) Build a wall round the Great Tope, Temple, Vihara, and Chaitya; clear of all ancient foundations of buildings.
- (15.) Complete small repairs to buildings to secure them against rain.
- (16.) Put up stone slabs with inscriptions giving name and date of each structure and when repaired.

Appendix H.

Reports and correspondence, &c., on Ancient Monuments in Rajputana.

1. The Government of India has, since June 1882, been in correspondence with the Agent to the Governor General concerning monuments in Rajputana; and the latter has reported that, as a rule, the Rajputana Chiefs prefer to make their own arrangements for the preservation and repair of their ancient ancestral buildings, but that all that is needed is to indicate where restoration is proper and necessary.
General subject of repair to monuments in Rajputana.
Report of Agent, Governor General.
2. The Secretary to the Government of India, Foreign Department, in approving the suggestions of the Agent to the Governor General, observed in a letter to the latter, dated 12th June 1883, that "the objects of the Government of India will be fully attained if the Durbars can be induced to make a real effort to carry out Major Cole's plans by means of their own Agency."
Order of the Government of India.
3. I visited Ajmir on the 28th of July 1882, and inspected the Pavilion in the Daolat Bagh which has hitherto been used for municipal meetings. It had been partially freed of its excrescent buildings by Mr. Brassington, Executive Engineer at Ajmir, but I found that a good deal more clearing and some dismantling would have to be done before a correct perception of the necessary remedies could be acquired.
Ajmir.
4. Mr. Saunders, the Commissioner, drew my attention to some buildings in the Ajmir Fort. They are of Akbar's time and certainly worth photographing. The principal Pavilion is used as a Tehsil. The entrance gateway has some nice screen-work which I noticed to be closed up and which should be opened out.
Akbar's Buildings in the Ajmir Fort.
5. I went to the Mosque called the "Arhai-din-ka-Jhompra," a dome of which is still open and requires repair. It appeared to me desirable to remove a tree in front of the facade, as the range of arches cannot be properly seen. The pillars of the building require cleaning; at present the elaborate carvings are full of dirt and plaster.
Mosque at Ajmir.
6. I again visited Ajmir on my return from Meywar, and on the 14th August went over the fort crowning the Taraghar hill, in order to see the ruined entrance gateway for which Lieutenant-Colonel Steel, R.E., had asked me to provide a restored drawing. There are several tanks in the fort, and a Mosque of Akbar's time liberally white-washed by the Muhammadans. They hold an endowment of about Rs. 5,000 annually for the maintenance of the structure, and might be induced to apply more appropriate remedies and keep the place clean.
Taraghar Gate, Ajmir.
7. In October 1882 I forwarded plans for repairing the Pavilion in the Daolat Bagh, and for restoring the Taraghar gateway at Ajmir, to the Agent to the Governor General in Rajputana.
Pavilion in the Daolat Bagh, Ajmir.
8. In November 1882 Mr. Brassington sent me an estimate amounting to Rs. 288 for further demolishing the old rotten work in the modern surroundings of the Daolat Bagh Pavilion, and I returned it recommended.

9. In January 1883 I approved and returned Mr. Brassington's estimate amounting to Rs. 323 for repairing one of the domes in the Arhai-din-ka-Jhumpira Mosque.

Estimate for repairs to the Ajmir Mosque.

10. An estimate amounting to Rs. 10,000 having been drawn out by Mr. Brassington for restoring the Taraghar Gate, the Government of India undertook to provide half the estimated cost, and I was asked for the other half. I was at the time unable to recommend this allotment.

Estimate for repairs to the Taraghar Gate, Ajmir.

11. An estimate amounting to Rs. 10,836 for completely repairing the Pavilion in the Daolat Bagh, having been drawn up by Mr. Brassington, Executive Engineer, Mayo College, Ajmir, and sent to me for opinion, I returned the same in June 1883 and offered to contribute a sum of Rs. 5,000 out of my budget grant for the year 1883-84.

Estimate for repairs to the Pavilion in the Daolat Bagh, Ajmir.

12. A survey of Khoja Synd's Tomb and adjacent buildings at Ajmir was made in August 1882, and will with notes show what are the requisite remedies for preserving the various edifices.

13. My inspections in the territories of His Highness the Maharana of Udaipur occurred between the 30th July and the 9th August 1882. Notes on Udaipur, Ahar, Nagda, and Chittore have already appeared in the Appendix of the Annual Report for 1881-82 (see page clixv). Complete surveys were with the consent of the Maharana made during March and April 1883

Meywas.

Surveys in the Fort of Chittore.

of the Khumbo Ranas Tower of Victory, of the Jaina Tower, and of the Sanga Chauri in the Chittore Fortress. The plans are about to be forwarded to the Agent to the Governor General in Rajputana together with recommendations for repairing those very elaborate and interesting structures.

14. I visited Mount Abu on the 17th August in order to confer with the Agent to the Governor General, and took the opportunity of again inspecting the Dilwara Temples which I now have permission from the Sirohi Durbar to survey.

Mount Abu.

Dilwara Temples.

The means at the disposal of the Jain Committee for maintaining these structures are ample and sufficient to keep them in the good condition, which, as works of art of no mean order, they well merit. A careful survey will be required to show what is the present condition of the Temples and to indicate what is required to prolong their existence and preserve their elaborate architecture.

15. On my return from Rajputana to head-quarters in August 1882 I stayed a day at Jaipur and went out to the Maharaja's Palace at Amber. My inspection notes are embodied in a memorandum dated the 18th August, addressed to the Resident at Jaipur (see page clixiv of the Annual Report for 1881-82). Permission has since been given by the Maharaja for me to make a survey of Amber, and this will afford an opportunity of recording in detail what should be done to maintain the Palace buildings in the condition which they deserve.

Amber Palace, Jaipur.

Appendix I.

Reports and correspondence, &c., concerning Ancient Monuments in the Punjab.

1. The Punjab Public Works Department had, on the 4th March 1882, sanctioned an estimate amounting to Rs. 14,130 for repairing the tomb of the Emperor Jahangir at Shahdara, and directions were given to make as much progress as possible before the close of the financial year.

2. On the 15th May 1882 I was informed that funds were required to carry out the following works:—

	Rs.
I. Restoration of Jahangir's Tomb at Shahdara, Lahore: estimate sanctioned for Rs. 14,130; balance required for 1882-83	11,000
II. Gateway of old Serai Nur Mahal: estimate sanctioned for Rs. 3,500; expenditure 500; balance required for 1882-83	3,000
III. Laying out grounds near Humayun's Tomb, Delhi: estimate called for, probable outlay about	2,500
IV. Improving and fencing the grounds attached to Jamali Kamali Tomb and Mosque at the Kutub, say	500
V. Improvements to Shalimar Garden, Lahore	3,000
Total Rs.	20,000

3. On the 19th June I submitted plans and drawings showing how the gateway of the serai at Nur Mahal near Jullundur should be repaired in order to follow the old architectural lines.

4. On the 12th July the plans for improving the enclosure to Humayun's Tomb was sent to me for opinion. These I returned pointing out that modernizing the grounds seemed objectionable, and that the old masonry water-channels and raised paths should be set in order, so as to preserve the original geometrical arrangement of the garden, the plots of ground then under cultivation by the representative of the kings of Delhi for tobacco, &c., being simply rescued and turfed. This has since been done.

5. On the 13th July General Pollard sent me a plan and estimate for repairing the tomb and mosque called Jamali Kamali at Delhi. I returned these remarking that I thought the tomb and mosque should *not* be restored but simply repaired, and the ornamental gothic iron gates provided for by the Executive Engineer should be replaced by perfectly plain ones. I also advocated *repairing* the existing tile work, *not restoring* it. There is insufficient data in the existing portions of both mosque and tomb for *restoration* of their structures.

6. A sum of Rs. 38,000 was allotted on the 9th October 1882 to the Punjab Allotment from Imperial out of the Government of India grant for conservation of ancient monuments.

7. A revised estimate for repairing the mosque and tomb of Jamali Kamali was sent to me by the Punjab Government, and I returned it recommended on the 12th October.

8. It having been decided that Mr. Heath, Executive Engineer, Archaeological Division, North-Western Provinces, could not be spared to superintend work in the Punjab as proposed, Sir Charles Aitchison determined on appointing a special officer. The following Resolution was communicated to me and published by Sir Charles Aitchison :—

"With reference to Government of India, Public Works Department, letter No. 137, dated 23rd September 1882, to your address, placing at the disposal of this Government a grant of Rs. 38,000 for the restoration of historical buildings in the Punjab, I am desired by His Honour the Lieutenant-Governor to forward for information copy of a Resolution, No. 3872, dated 3rd November last, issued in this Department regarding the formation of a new sub-division under the charge of Lieutenant Abbott, R.E., Assistant Engineer, for carrying out the several restorations proposed in this Province, and to intimate the action already taken by the Provincial Public Works Department in regard to them.

"Resolution by His Honour the Lieutenant-Governor of the Punjab, in the Public Works Department, dated 3rd November 1882.

"OBSERVATIONS.—Her Majesty's Secretary of State having sanctioned the appointment of a Curator of Ancient Monuments charged with conserving under Government the most celebrated and important examples of national archaeology and architecture, the Governor General in Council was pleased to appoint Captain H. H. Cole, R.E., to be Curator, and to direct him, in communication with Local Governments and Administrations, to inspect and report on such of these as either from an archaeological or artistic point of view are worthy of preservation or restoration.

"In compliance with these orders Captain Cole has examined and reported on the most important buildings in this Province.

"(2.) The cities of Delhi and Lahore, as well as other parts of the Punjab, are peculiarly rich in such national monuments, and the Lieutenant-Governor would gladly see all those enumerated in Captain Cole's report taken up in turn; but in view of the limited amount of funds, Imperial and Provincial, that could be justifiably appropriated, such restoration can only proceed gradually. Work enough might undoubtedly be found in and around the great centres of Delhi and Lahore to justify the establishment of a separate division, but at present the available funds will not admit of this.

"(3.) Further the work of restoration of these historical and specially architectural or artistic buildings, necessarily proceed with caution, judgment and artistic taste, and the superintendence should be entrusted to an expert, or an officer who may make the work a special study. In the absence of any specially qualified officer, the best way of obtaining such an expert will be to train him up for the work under Captain Cole's superintendence, and this can be best done by nominating a junior officer of the Public Works Department, and attaching him to the Executive Division within which the buildings to be first taken in hand are situated.

"RESOLUTION.—To meet as far as possible the wishes of the Government of India, His Honour the Lieutenant-Governor has resolved, as an experimental measure for two years, on the formation of a sub-division and the nomination of a young officer of the Public Works Department to take charge of it. The pay and allowances of this officer will be borne by the Province, and he will, in close communication with, and under the approval of, the Curator of Ancient Monuments, arrange the plan of the repairs and prepare the estimates, which will then be laid before the Punjab Government for acceptance, formal sanction, and allotment of funds from such sums as may from time to time be granted by the Government of India, supplemented by whatever funds it may be found possible to give from Provincial sources.

"In conformity with these views, His Honour the Lieutenant-Governor is pleased to appoint Lieutenant Abbott, R.E., to the charge of the new archaeological sub-division. This officer will be in the first instance attached to the Lahore Provincial Division."

9. A revised estimate for repairing the Nur Mahal Gateway had been sent to me for remarks on the 4th December 1882, and was returned recommended on the 13th of the month.

10. From the 21st to the 31st January 1883 I was engaged in going over the various buildings at Lahore, Delhi, and Jullundur with Lieutenant Abbott, R.E., and subsequently submitted the following inspection notes to the Punjab Public Works Department—

NOTES ON BUILDINGS AT LAHORE.

Asaf Khan's Tomb at Shahdara.

Sanctioned estimate for Rs. 3,781.

The surface masonry of the walls has been plastered up and panelled. This was done without my knowledge and does not repeat or follow the old lines of the design. The plaster surface should be removed at once, and, to prevent further ruin, only the gaps in the walls filled in with brick masonry. The drainage from the roof and dome should be provided for by pipes to carry the water clear of the walls.

The little ornamental tiling that remains is to be secured by edging with cement, but no painted work is to be done. Any painted work that has been done should be removed.

The floor of the tomb is to be covered with concrete.

The ground round Asaf Khan's Tomb should be taken up and released from cultivation and then turfed.

Jahangir's Tomb at Shahdara.

The present relaying of the mosaic terrace is done in too patchy a way to ensure that the terrace is rendered uniformly water-tight. The whole should be gradually relaid in sections of say 2 or 6 feet square. Each marble tile should be kept in its relative place in the pattern so as to ensure better fitting. To do this will require very great care in taking up the mosaic. The marble work should be laid out on a table of the size of the sections under treatment; damaged marbles should then be replaced by new ones; the whole relaid on the terrace embedded in cement. The terrace over the passages to the Tomb and over the verandahs should be done first.

[I have recommended the expenditure of Rs. 3,000 on a portion in order to arrive at a rate for the whole.]

The walls of the verandahs should be freed of whitewash, and the tile work carefully cleaned.

The grounds should be taken over and laid out on the old lines of the garden, the present areas under cultivation being turfed.

[I have recommended an expenditure this year of Rs. 3,000 on works and Rs. 2,000 on the rental of the grounds.]

The enclosure arcades and entrance buildings should be freed of all the modern partitions and walls that were inserted by the railway authorities or others; until this is done it will not be possible to judge of the best way of dealing with the old structures. I have seen and recommended Lieutenant Abbott's estimate for this work amounting to Rs. 392.

The encroachment of the Ravi should be very carefully watched.

Shahdara Gardens.

I approve of the estimate framed by Lieutenant Abbott for improvements to the Shahdara Gardens, but the enclosure walls require attention, and

Shahdara Gardens.

an estimate should be framed for straightening the portions that are dangerous and out of the perpendicular.

Any repairs or rebuilding should be in perfectly plain brick masonry, and no ornamental surface plastering is to be renewed.

The public should be able to see the exteriors of the two gateways that are ornamented with coloured tile work. This tile work is a good deal damaged and should be secured by cementing the fractured edges.

The building marked on the plan as the Khwabrah is of no importance, and its demolition would improve that part of the grounds. [I have seen Lieutenant Abbott's estimates and have recommended an expenditure this year of Rs. 4,000.]

Ali Mardan's Tomb.

This building stands on the south side of the Shahjimar road opposite the Golahi Bagh.

Ali Mardan's Tomb.

The Tomb has been gotted of all its surface masonry. The only thing to be done is to fill up the larger gaps in the walls with brick work, and to remove the walls which block some of the exterior archways.

Near the Tomb is a building worth preservation, covered with brightly coloured tiles. It should be freed of all its modern additions and the tile work secured.

A path should be made from the high road to these two buildings.

Naulakha Burj.

Litham Fort.

This building should be taken in hand before others in the Fort.

The parapet to be restored. The marble chujjas with their architraves and brackets to be made good where fallen. The exterior marble work to be renewed where its place has been taken by plaster.

The floor of the pavilion to be relaid in marble. All painted putty or cement to be removed from the mosaics, and all mosaic work to be renovated where there is sufficient evidence for the pattern.

The roof to be made perfectly water-tight, the modern painted work to be left as it is for the present.

The marble screen-work flanking the pavilion to be repaired and restored.

All white and colour washing to be removed from the masonry work in the Shish Mahal and Palace buildings. [Lieutenant Abbott has framed an estimate which I have seen and recommended.]

Chauburji.

This gateway is close to the road. The gaps in the walls and unsupported projections should be filled with brick masonry.

Chauburji on the Malina Road.

The tile work should, in damaged places, be edged with cement. Some of the panels are blackened with damp, and an experiment should be made to clean the surface. A subsequent wash of silicate may protect them from the weather. Silicate wash can be obtained in Calcutta.

The cracks in the arches should be carefully filled with cement, and the spaces in the coving of the towers left bare by the falling away of tiles should be filled up with cement.

Tomb of Ishaq Ghori on the Mian Mir road.

Gaps in the masonry should be filled. The dome should receive petty repairs to arrest further decay.

Ishaq Ghori Tomb, Mian Mir Road.

The fallen chujjas to be replaced and the plastering of the coving under them to be renewed.

No plaster work is to be done inside.

Golahi Bagh Gate on the Shahjimar Road.

Golahi Bagh Gate, Shahjimar Road.

Gaps in the masonry to be filled up, broken tile edges to be cemented; remove extraneous partitions and fence in the front like the Chauburji.

Dai dagan near the Golahi Bagh.

Fill up gaps in masonry; preserve the tile work by cement edging; make an experiment to clean the painted work, particularly in the exterior kiosques; open out the staircase to the roof.

A wire fence should be placed round the raised terrace and the weeds and earth removed off it.

Sharifu Begum's Tomb.

This is a square building with some fine tile work of cypress trees on a white ground.

Sharifu Begum's Tomb, near the Golahi Bagh.

The raised terrace surrounding it has been removed, the masonry of the lower portion should be repaired and painted, and the tile work preserved by edging.

Begumpura Masjid is worth preserving, and permission should be obtained and the building taken on the Natal list.

Begumpura Masjid.

All tile work to be cleaned and preserved, where necessary, by edging.

The fallen chujja should be replaced.

Makbara and Masjid of Khwaja Kamrud Mahmud at Begumpura.

The dome and lower masonry of the Tomb may be repaired and the interior painting on plaster cleaned.

Makbara and Masjid of Khwaja Kamrud Mahmud.

The Mosque is only worth petty repairs to prevent it falling.

Makbara Shah Rahmatul.

Makbara Shah Rahmatul, near Begumpura, is worth only petty repairs to the masonry walls and domes.

Tomb of Parais.

Tomb of Prince Parais, near Begumpura, is worth petty repairs only.

NOTES ON BUILDINGS IN THE JULLANDHUR DISTRICT, PUNJAB.

Nakodar—15 miles from Jullundur civil station; has two tombs of considerable beauty and interest; said, in the list of objects of antiquarian interest

Tombs at Nakodar.

in the Punjab published in 1875, to have been built in the reign of the Emperor Jahangir. I visited them with Mr. Harrington, Executive Engineer of

Larger Tomb.

Jullundur, and Lieutenant Abbott on the 31st January last. The larger tomb is square in plan and of brick masonry, covered outside with brilliant tile work of the mosaic class. The interior is plastered with chunam and slightly decorated.

The structure has been freed by Mr. Harrington of modern doors, &c., and is in course of repair. The structure is in fair order, but the terrace on which it is raised requires relaying, and the tile work is a good deal decayed on the north, south, and east sides. The west side is in good order excepting the lower portions, which appear to have been wifally removed. Mr. Harrington wishes to restore the tile work, but the cost would be great even if the work could be satisfactorily done. I think an experiment might be made to reproduce one panel, but the rest of the tile work should be preserved by cleaning, washing over with silicate wash, and edging with cement. The colours employed in the patterns are numerous—yellow, green, white, dark blue, turquoise, deep maroon, orange,—many of which are not produced by the modern tile-workers in India.

The repairs to the interior of the tomb should leave it as originally, and no new colouring introduced in the plaster or chunam work. The door and other openings should be closed by iron bars let in to the wall near the inner surface so as to leave a good "reveal." One opening should have a wicket or gate.

The lower part of the exterior surface of the dome wants cleaning up. An inscribed band runs round the lower part of the dome inside the tomb, and would probably give the date of the building and name of the person for whom it was erected. A ground plan should be made and outline elevations and sections. A photograph should also be taken to show the west façade, and details drawn of the tile panels.

The smaller tomb is octagonal in plan and has the appearance of being the older in date.

Smaller Tomb.

Mr. Harrington is removing the modern doors, &c., and about to repair the structure. The inscription in the building will probably give the correct date and information of the building. The material used is brick, which, where not covered with tile work, seems to have been originally painted. Now a number of vulgar modern Sikh paintings cover the walls, and their removal to show original pointed brick surface would be no disadvantage. The tile work is of a singular class, being edged by brick and entirely geometrical in pattern. Yellow turquoise, dark blue, green, and a variegated blue, are the colours used. The repairs to the interior should have the appearance as nearly like the original design as possible, and as in the case of the larger building the openings should be closed by iron bars, one being fitted with a door. A plan outline elevation and sections should be made and a photograph taken and details drawn in colour of the different tile patterns.

In removing plaster from tile work or the brick surfaces of the wall, care should be taken to soften it by native vinegar or acid and water, so that it may be removed without injury or scratching of the work underneath.

I have not seen the estimate for repairing the Nakodar tombs, but have recommended an expenditure this year of Rs. 2,000.

After visiting Nakodar, Mr. Harrington, Lieutenant Abbott, and I went on to see the work in progress at Nur Mahal. The principal gateway of the Sarai built by Nur Jahan, the wife of Jahangir, is being completely renovated. The structure has been rendered secure by Mr. Harrington, and the carved masonry of the facade is in process of being restored in a thorough manner by that officer. I have both photographs and plans of this building, but a completion photograph should be taken of the facade to illustrate what is done.

NOTES ON BUILDINGS AT DELHI.

Tomb and mosque known as Jamali Kamali.—The pointing in the masonry of the mosque has been done too heavily and in grey. It should be as light as possible and of the same colour as the stone. No more plaster than absolutely necessary should be used anywhere.

Mosque.

The mihrabs or western niches of the mosque should be cleaned. The finial or pinnacle of the central dome of the mosque has been incorrectly renewed and should be removed; failing more authentic information of the original surface of the dome, it would be better to colour the plaster like the masonry, not grey as at present.

The ornamental plaster incrusts in the enclosure walls of the mosque should be cleaned.

Tomb of Jamali Kamali.—All the exterior and interior tile work should be carefully cleaned. The pointing of the plaster, ceiling, and walls should adhere closely to the original colours. The work might be given to Ismail Khan,¹ painter in Delhi. The pavement of stone squares, about to be repaired in front of the tomb, has a central portion of ornamental plaster which should be left as originally designed. The pattern can be made out from what is left. [An estimate has been recommended by me for the above and sanctioned.]

The mosque and tomb when repaired should be in charge of a resident chowkdar and not made over to the Muhammadans. Near Jamali Kamali is a rectangular pavilion on 44 square pillars with a domed plaster ceiling worth care on account of its incised ornaments.

Kutub Minar and surrounding buildings.—These should be enclosed by a fence of wire supported on stone uprights, and the grounds turfed and pathways kept trim. I have pointed out to Lieutenant Abbott what direction the fence should take, and what grounds and buildings should be enclosed. [An estimate for this has been sanctioned.]

The tomb of Imam Zamin should have all whitewash removed from its walls and pierced screens and its fallen chujja renewed. [An estimate for Rs. 43 has been recommended by me for the above and sanctioned.]

Alau-ud-din's Gateway.—To have a concrete floor and its masonry carvings and walls cleaned. The missing points of the cusped arch to the east should be renewed. [An estimate has been recommended by me and sanctioned for the above.]

Shams-ud-din's Tomb.—Clean up the marble tombstone and remove all traces of whitewash from the carved masonry walls of the structure.

Shams-ud-din's Tomb.

The great range of arches in the Masjid-i-Kutub-ul-Islam require to have their carved surfaces cleaned, also do the carved pillars of the colonnades. A lump sum of, say, Rs. 500 might with advantage be set aside this year, i.e., before the end of March, for cleaning such

Great Arches.

Cleaning of carved work.

carved work. The domes of the mosque should be repaired where necessary, also the terrace roofs. [An estimate for the above has been sanctioned.]

Tombs of the Lodis near the road between the Safdar Jung and Humayun tombs.—There are two octagonal tombs and two square ones, all worth attention. The two latter are close together and encroached on by dwellings of cultivators.

Attached to the larger square tomb is a mosque with profuse plaster ornament occupied, apparently by cattle, and very dirty and neglected. All the buildings should be placed in a state of cleanliness and repair, and rendered accessible from the road by paths. Ground plans should be made of all and photographs taken. Detail drawings should be made of the different classes of ornamental plaster and stone work.

¹ Superintendent of the paintings employed by the Moghul court Akbar's time.

Humayun's Tomb.—The railing on the raised platform to be repaired. The interior walls of chunam require cleaning and the portions whitewashed should be renewed in chunam. The finials or pinnacles of the kiosque on the roof should be renovated. The plastered walls of the roof buildings should be cleaned and the chuffas repaired. The inlaid paved floors of the interior of the tomb should be renovated where damaged.

The small tomb in the Humayun enclosure requires to be freed of weeds and small trees and the floor renewed in concrete. [An estimate for Rs. 187 has been sanctioned for this.] The blue-domed tomb outside the Humayun enclosure towards the Juma should be rendered accessible and the surrounding ground freed from cultivation. The tile work on it should be cleaned and protected where needful by cement. [An estimate has been sanctioned for this.]

Kila Kona Masjid in Parana Kila.—This should be cleaned up. The floor repaired in concrete, the stone and marble mosaic repaired, the fallen chuffas renewed, the bracketed window over the central arch repaired, and leaks in the roof stopped. All the interior stone and marble work should be thoroughly cleaned. [Lieutenant Abbott has been furnished with the plans and drawings of this mosque made in my office, and has framed an estimate which I have seen and have recommended an expenditure this year of Rs. 2,500.]

Dewan-Khas in the Delhi Fort.—The condition of this palace building has already been noted on in my report of the 10th May 1880.

The first thing to be done is to provide for the security of the roof without disturbing the wooden ceilings. The wooden joints should therefore be left and when necessary strengthened and supplemented by iron girders. What is actually required can only be ascertained when the roof is opened out from above.

The central ceiling should be repainted according to the original pattern, and the verandah ceilings touched in damaged places.

The whole of the mosaic work should be restored where the original pattern is known. The railings towards the Juma and flanking the building should be renovated. [No estimate has as yet been drawn up for this. I have recommended an expenditure of Rs. 3,000 this year.]

Drawings in the Delhi Fort.—The black marble mosaic work behind the throne requires complete renovation, and a rough estimate should be framed based on the full-sized tracings that I have had prepared. [A number of coloured drawings were made by Delhi artists before the mutiny, and from copies of these obtained from various sources, I have been able to ascertain the design of the original mosaic. The pieces that were removed by Sir John Jones in 1857 and now in the India Museum at South Kensington have been copied. No estimate has as yet been framed. I have recommended an expenditure this year of Rs. 2,100.]

The Khadoon Pavilion in the Delhi Fort, now occupied as a gymnasium, is to be made over for repairs (vide letter No. 223 of the 16th January from the Inspector-General of Military Works); an estimate should therefore be framed for renewing the floor and mosaic work and for restoring the fallen chuffas. It will also be necessary to rebuild the flanking kiosques which were like those in the corresponding Pavilion "Sawun."

11. Up to the end of the financial year 1882-83, Lieutenant Abbott has been engaged in carrying out the various sanctioned works, modifying them where necessary. He has also been engaged, in consultation with me, in framing and revising estimates for the various buildings at Lahore, Delhi, and Jullundur, noted on by me in January last. The estimates are noticed in the foregoing inspection reports.

12. After conferring personally with Colonel Limond, R.E., C.B., Secretary to Government, Punjab, Public Works Department, I have now addressed him officially as follows:—

"I have the honour to enclose the following estimates received from Lieutenant Abbott, R.E., Assistant Engineer, Archaeological Sub-Division, Punjab:—

1.—Revised estimate for relaying the upper terrace of Jahangir's

Tomb

11.—Estimate for special repairs to Jahangir's Tomb

12.—Cost of annual repairs to the Shahdizar Gardens, Lahore

13.—Estimate for special repairs to the Shahdizar Gardens, Lahore

Rs.

65,100

51,079

794

12,546

"I have noted my recommendations on the reports of each estimate.

"As regards the relaying of the upper terrace of Jahangir's Tomb, I recommend the expenditure of Rs. 5,000 on a portion, so that a rate for the whole may be arrived at.

"As regards the special repairs to Jahangir's Tomb, nothing will show to advantage if the garden is a jungle, and to put the masonry drain channels, paths, and plots of ground in decent order is, I think, a very proper work for the Public Works Department to undertake. I would therefore propose an expenditure of Rs. 2,000 on this.

"Towards the other works specified in the estimate, I recommend an allotment of Rs. 5,000 to be applied in renovating the walls and ceilings of the verandah, and in cleaning up and renewing the finches on the walls and ceilings in the corridors. I have initialed the items concerning this work. They amount to Rs. 5,607.

"With reference to the estimates for the Shahjimar Gardens, I recommend an allotment of Rs. 794 for the annual repairs, provided that no whitewash be undertaken, and that the pavilions be gradually chumamed.

"For the special repairs to the Shahjimar Gardens, I recommend Rs. 4,000 this year to be applied as Lieutenant Abbott may think best, so as to cover the more urgent repairs.

"The various works in progress or projected now stand as follows, and I have noted the allotments which I would recommend:—

Works.	Proposed allotment.	Remarks.
<i>Jahangir's Tomb.</i>		
i.—Estimate for relaying terrace—	Rs.	
Amount of estimate	Rs. 65,100	
Expended to end of March	" 17,324	
BALANCE	" 47,776	5,000 To cover an experimental relaying.
ii.—Rough estimate for—		
Special repairs	Rs. 51,929	5,000
Allotment for garden	" 2,000	2,000 This I think most necessary.
<i>Shahjimar Gardens.</i>		
i.—Special repairs	Rs. 12,546	4,000
ii.—Annual repairs	" 794	794 Exclusive of whitewash.
<i>Petty repairs to the several buildings of historical interest round Lahore.</i>		
Balance of estimate	Rs. 4,798	..... As far as I remember no allotment needed.
Naulakka Pavilion, Lahore Fort—		
Special repairs	" 8,500	1,000 To commence repairs to structure.
Removal of railway buildings at Shahdara	" 392	392
Repairs to Fort historical buildings	" 800	800 No estimate has reached me.
Nakodar Tomb—		
Special repairs	" 5,743	2,000 I have not seen this estimate.
Special repairs to Kila Kona	" 4,264	2,500 To be applied as Lieutenant Abbott thinks best.
Mosque, Delhi	" 2,727	2,727
Petty repairs to historical buildings in and around Delhi	" 300	300
Battle Monument at Ferozepur	" 300	300
Hiran Minar Tank, and Baradari, Gujranwala	" 2,700	2,700
Establishment	" 3,000	3,000
Dewan-i-Khas roof at Delhi	" 2,000	2,000
Dewan-i-amr mosaic at Delhi	" 3,413	3,413
TOTAL	34,413	
Punjab allotment	15,000	
Balance required	19,413	

"I have not yet seen the Nakodar Tomb estimates and should like to do so.

"If this projected allotment is approved by His Honour the Lieutenant-Governor, I will recommend an allotment of Rs. 19,413 to make up the necessary balance."

13. Since this I have received and commented on estimates framed by Lieutenant Abbott, R.E., for annual repairs to various buildings in and near the Lahore Fort, and for restoring the unique black marble mosaic at the back of the throne in the Diwan-i-am, Delhi, and have seen the estimates of the Nakodar Tomb.

14. A sum of Rs. 19,892 has been finally allotted from the Government of India grant towards the various works specified above.

15. The following is a memorandum on excavations undertaken in Eusof-zai :—

Memorandum on Ancient Monuments in Eusofzai, with a description of the explorations undertaken from the 14th February to the 16th April 1882, and suggestions for the disposal of the sculptures.

1. The accompanying map of the Eusofzai district shows some of the principal sites where Buddhist ruins are known to exist. The majority of these have been explored—some thoroughly, others partially. Dr. Bellew obtained a large number of sculptures from Sahri Bahlol and Sawal Dheer; Dr. Leitner got others from the Takht-i-Bahi. Companies of Sappers working under General Cunningham, explored at various times the Takht-i-Bahi, Jamal-giri, Khurik, Charsudda, and some sites on the Karamar Hill. Others have removed sculptures from many of the Buddhist localities, but until recently nothing has been attempted, year by year, to systematically collect and preserve all the archaeological and artistic evidence of the country. On the 23rd August 1881, I submitted some recommendations to the Punjab Government for dealing with the ruins in the Peshawar District.

2. Captain Martin, R.E., and Lieutenant Maxwell, R.E., were at work with the 4th and 10th Companies of Sappers and Miners during February and April 1882 at Charsudda and the Karamar Hill. I visited Captain Martin's excavations at Charsudda. Lieutenant Maxwell's explorations were undertaken after I left the district.

3. I sent in a report, dated June 1882, on the season's work, and recommended the Punjab Government to systematically offer rewards for discoveries; also to explore particular sites by means of the tribes-people working under a native of the district.

4. This led to excavations, to arrange for which I visited Peshawar in January last. The Commissioner and Deputy Commissioner of Peshawar deputed Ibrahim Khan, of Zeda, to undertake the exploration of Ranigat through the Khudo Khyals; and Colonel Jenkins, Commanding the Guides at Mardan, kindly lent Jemadar Kaleh Khan, Havildar Mazam Shah, and Naik Faza Gul to conduct the excavations at Sanghao.

5. On the 14th January, I went over the Sanghao ruins and pointed out to Havildar Mazam Shah what I thought should be commenced first.

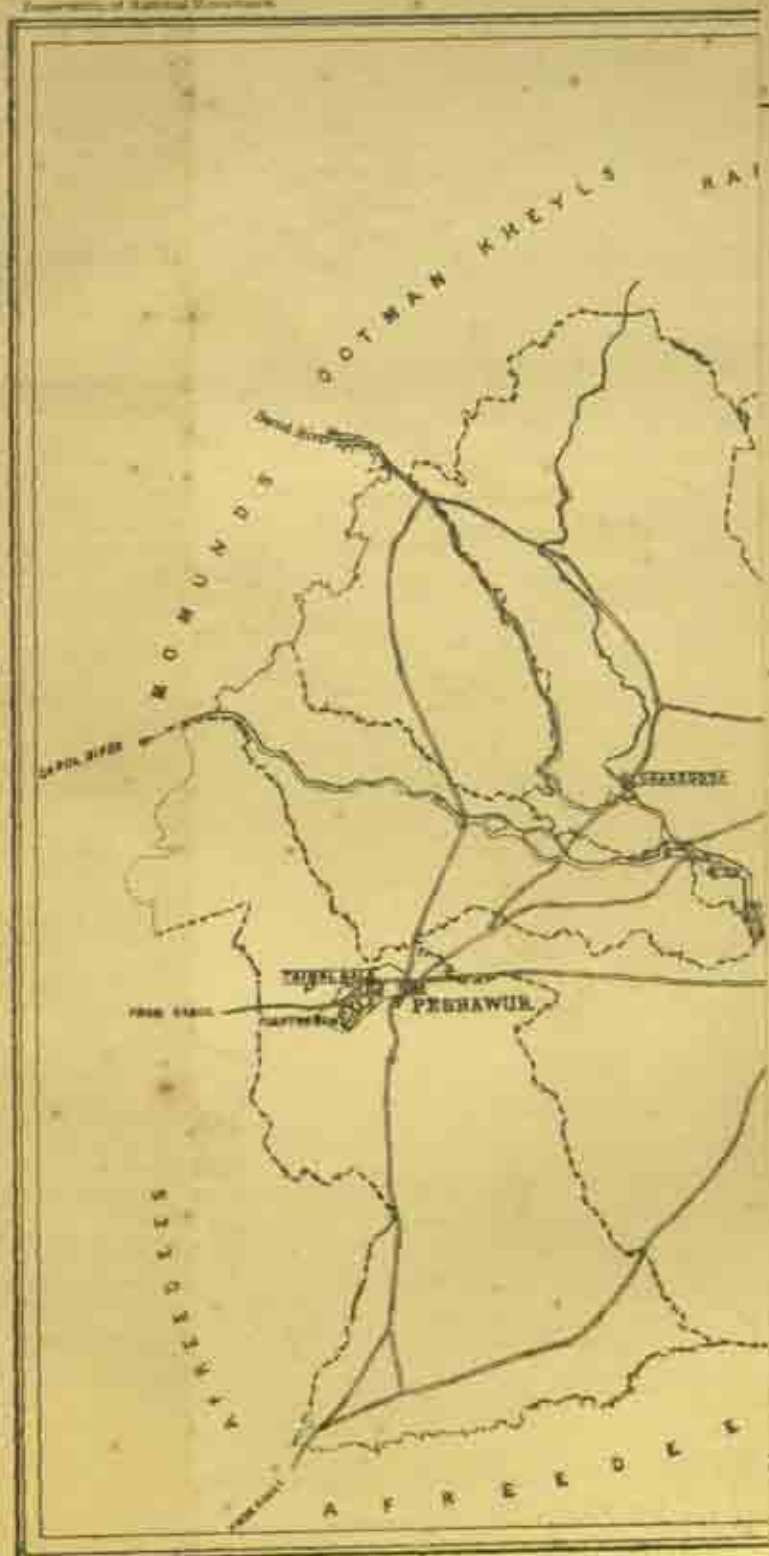
6. I proceeded with Ibrahim Khan, of Zeda, to Ranigat in the Khudo Khyal country, and on the 17th January visited the Buddhist Fort and pointed out what should be done.

My preliminary notes on Sanghao and Ranigat are here quoted :—

Buddhist remains at Sanghao, in Eusofzai.

1. These are in a valley beyond Katlung, and are known to Mazam Shah, Havildar of the Guides, who accompanied me over them. They extend over a large area on either side of a stream running from north-east to south-west.

1. General Cunningham discovered Jamal-giri in 1842. Lieutenant (now Sir Harry) Meadows Taylor at Khurik about 1845, at the request of the Commissioner of Peshawar, Colonel Mackenzie. Lieutenant Lumsden and Stokes partially explored Jamal-giri and Takht-i-Bahi in 1852. Dr. Bellew partially excavated Sahri Bahlol about 1869. General Macgregor sent Sappers to the Takht-i-Bahi in 1860-61, and a large number of sculptures were deposited in the Lahore Museum. Dr. Leitner in 1875 procured some sculptures from the Takht-i-Bahi through men of the Guides. Colonel Hastings (then Assistant Commissioner) in 1871-72 directed digging by Sappers in the Sadam Valley. Lieutenant Crompton, R.E., about 1872, directed explorations by Sappers at Takht-i-Bahi and Jamal-giri. "A Colonel from Peshawar" is said by the natives to have removed 24 cart-loads of sculptures from Jamal-giri before 1873. Jamal-giri was partially excavated in January 1873 by General Cunningham. Jamal-giri was extensively excavated by Sappers under Lieutenant Crompton, R.E., in 1873. Sahri Bahlol was partially excavated by General Cunningham in 1873. Sappers under Lieutenant Macgregor and Hazard were at work at Khurik in 1874. Sappers under Lieutenant Grant worked at Sawal Dheer in 1874.

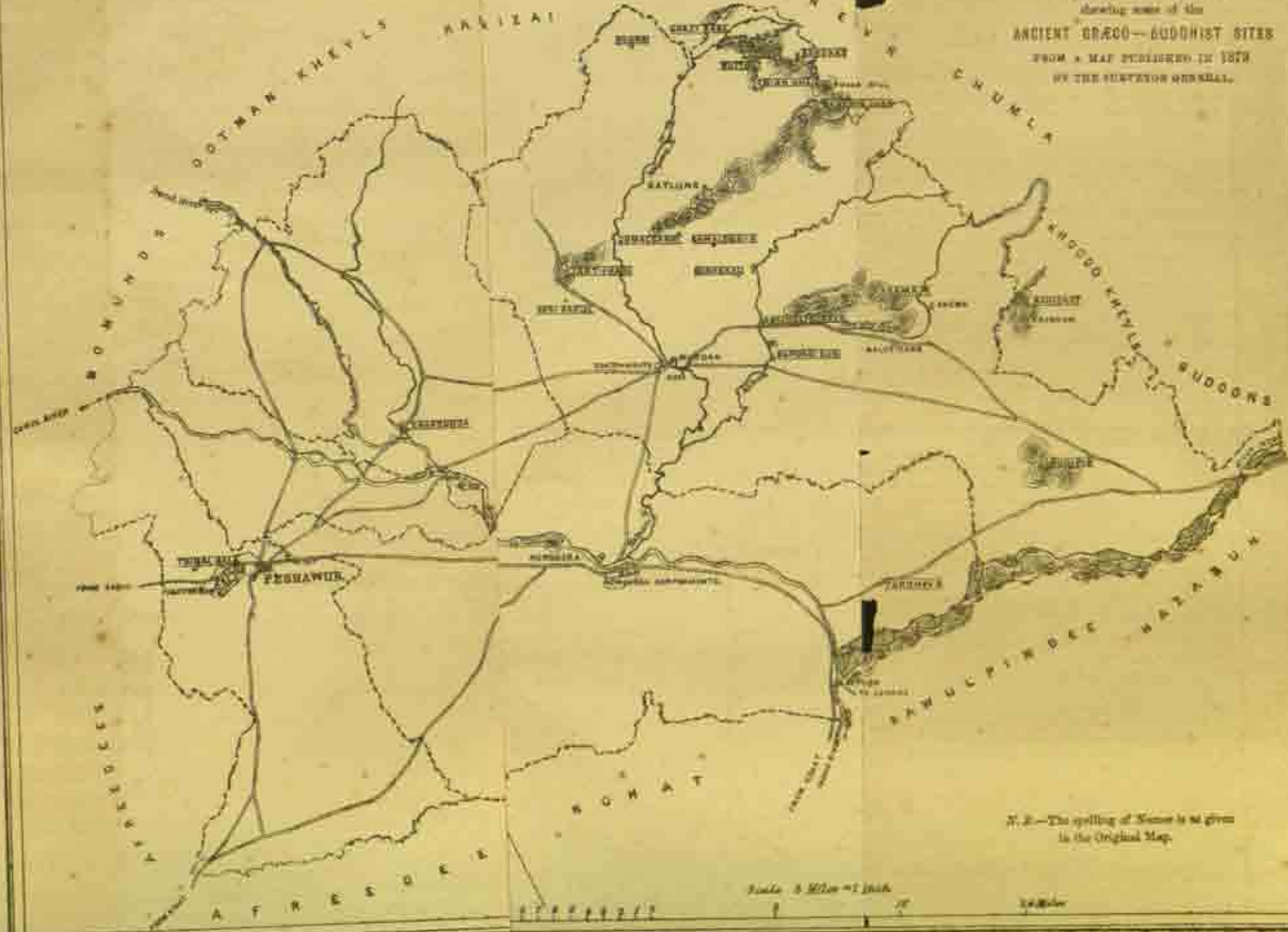


S W A T

M U N C H

MAP OF EUSOFZAI

showing some of the
ANCIENT GRÆCO-BUDDHIST SITES
FROM A MAP PUBLISHED IN 1879
BY THE SURVEYOR GENERAL.



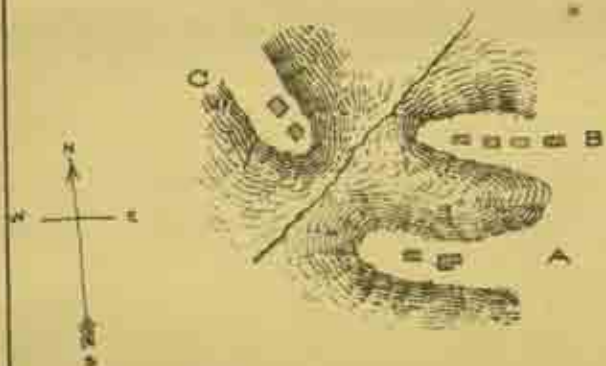
N.B.—The spelling of Namer is as given
in the Original Map.

Scale 5 Miles = 1 inch

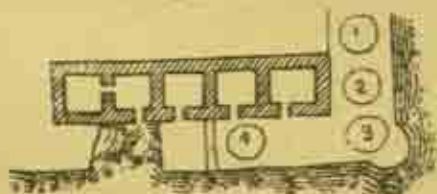
1879

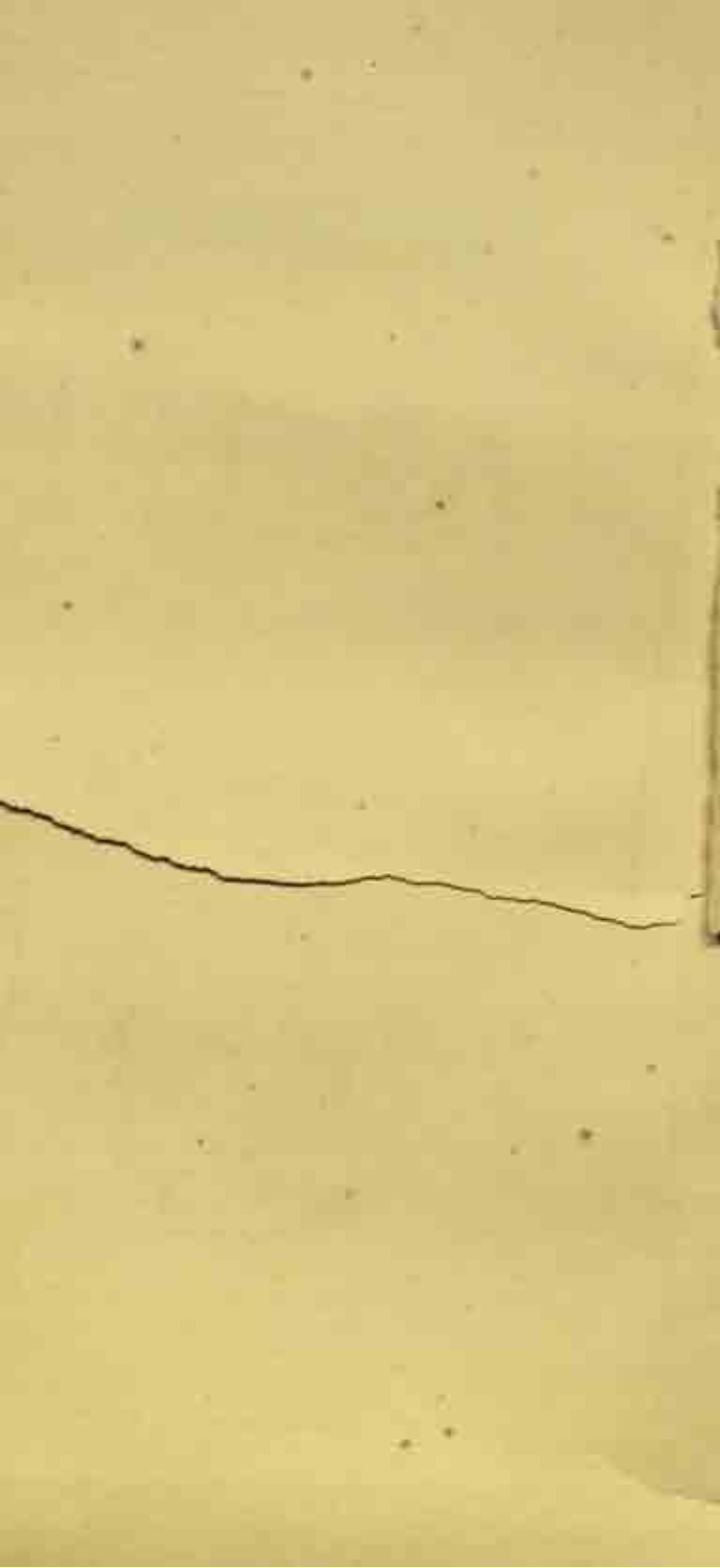


SUNGHIST REMAINS AT KANGHAO
IN NUSOFEL.

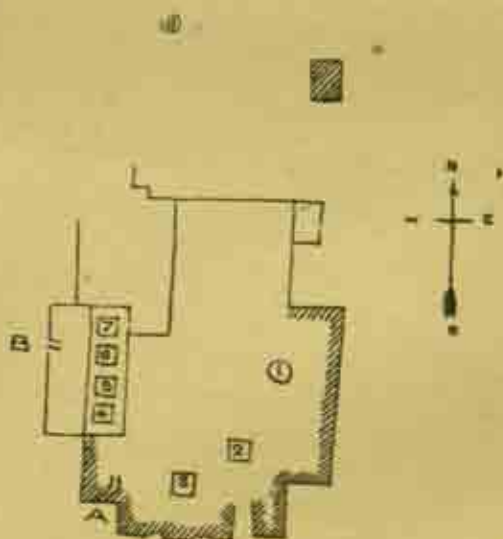


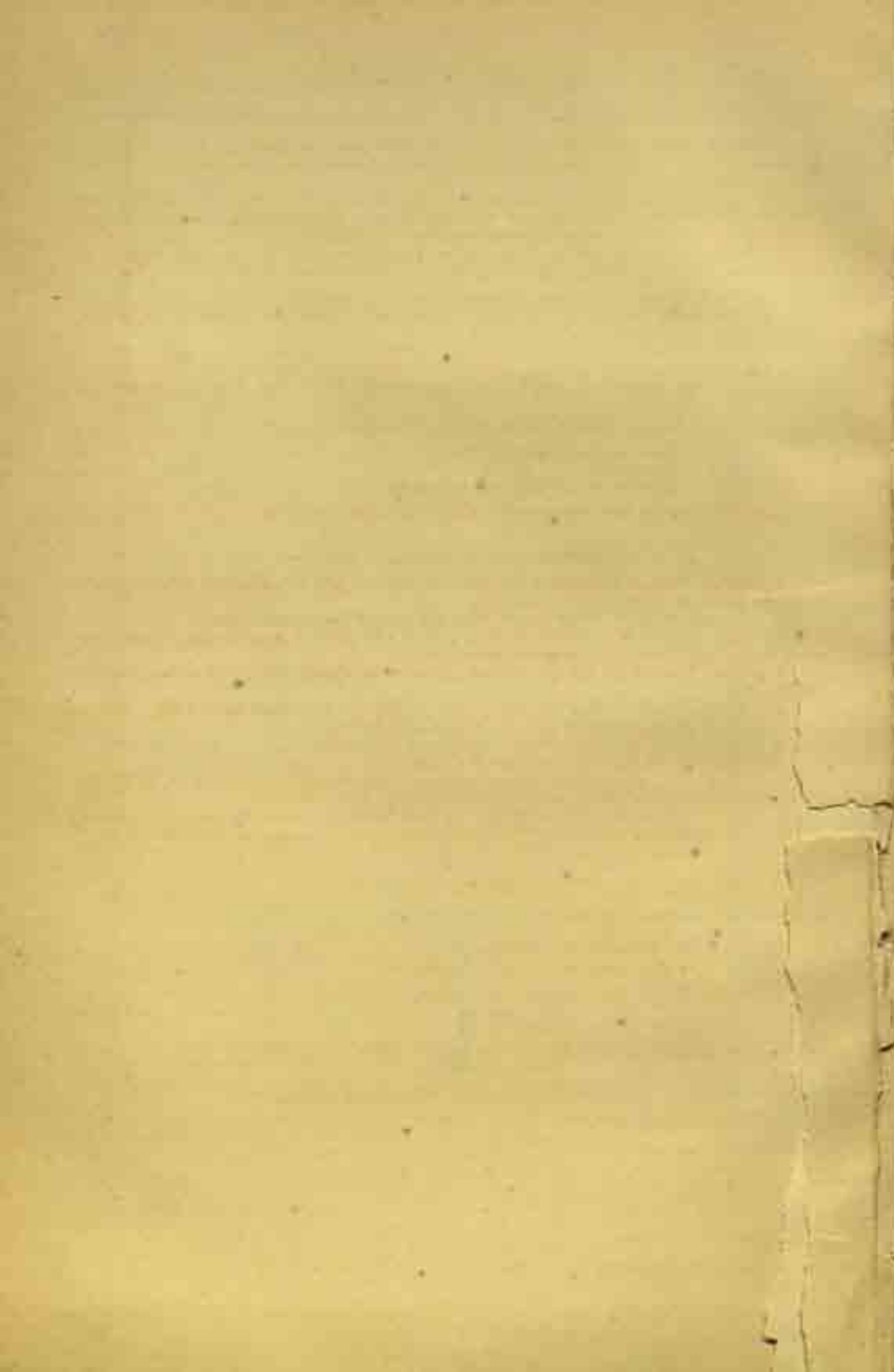
SKETCH PLAN OF UPPER BUILDING AT A.





SKETCH AND PLAN OF THE BUDDHIST FORT
AT NAUIGAT IN KUSOFEAL.





2. The most important buildings are on ridges, but many are scattered on the hill-sides. See sketch. Those at (A) are known to Mazam Shah, and should as a first measure be freed from debris and earth.

The upper building (1) is somewhat on the plan shown in the sketch. There are domed chambers, all of which should be emptied of debris down to the floor-level. The second building (2) has a somewhat similar series, which are also to be cleared out.

3. The buildings at (A) are to be put first in hand; then those at (B); then those on the other side of the stream at (C). Great attention is to be paid to the following:—

- (1) No walls are to be broken down or damaged in digging.
- (2) In clearing away earth from walls the excavations are to be carried down to floor-levels or to the ground.
- (3) The earth excavated is to be carefully searched for carvings or coins.
- (4) All carvings to be carefully marked as coming from Sanghao, and a note made of the position in which they were found. All sculptures to be brought into Mardan.

4. A sum of Rs. 800 will be available at once for this work, i.e.,—

Clearing jungle from buildings.
Excavation.
Carriage of carvings, &c. to Mardan.

Reports of what is done and progress of the work to be sent to me.

Buddhist remains at Ranigat, in Eusofai.

1. Ibrahim Khan, of Zebla, went over the ruins with me, and is acquainted with the position of all the buildings noted on the sketch plan.

2. All jungle to be cut down so as to show the walls of the different ruins.

The large Tope at (1) to be cleared first, and a shaft or well large enough to hold a man sunk in the centre down to the original ground surface.

The Tope Nos. (2), (3), (4), (5), (6), and (7) are to be cleared and bored in the centre in a similar way.

The passages in the walls of the Fort at (A) and (B) are to be next opened out. The well under the hemispherical dome at (8) to be opened and cleared.

A small square Tope further north to be cleared and examined.

The walls beyond this are to be cleared of debris and examined.

3. A road track to be made to the nearest road, and the shortest path up to the Ranigat Fort from Nagram to be made passable for the carriage down of carvings.

4. All carvings to be clearly marked as from Ranigat, and notes taken of where any stones or coins, &c., were dug out. They should be removed at once to Mardan, and reports are to be made to me of what is found and of services rendered by Asad of Totuli or any other Khudo Kheyls.

5. A sum of Rs. 1,200 will be available for this work, i.e.,—

Clearing jungle.
Excavation.
Carriage to Huti Mardan.
Improving path down from Ranigat.

7. On my return to Eusofai the end of March, I found to my regret that the Ranigat work had come to a stand-still owing to disturbances among the Khudo Kheyls.

8. The Sanghao explorations were, however, proceeding most satisfactorily. Colonel Jenkins showed me a large number of sculptures that had been brought into Mardan and deposited in the Regimental Magazine at the Fort. More were coming in.

Results of Sanghao excavations (March).

9. A report, dated the 10th March, by Lieutenant Youngblood of the Guides, described the work as he saw it on the 5th and 6th March. The sites at Sanghao and at Tangi had been opened out and 99 pieces of sculptured stones sent into Mardan. The villagers were reported very willing to work and friendly. No cases of tampering with the sculptures had occurred.

Lieutenant Youngblood's report.

10. On the 30th March I went over the sites at Sanghao, Tangi, and Nutra with the Native Officers of the Guides and saw all that had been done up to date. After I had left, a fresh site near the old village of Mian Khan was opened out and a number of sculptures discovered and sent in.

Excavation of Sanghao (March).

11. I returned to Mardan on the 31st March, and remained there in camp pending the

Marking and photographing sculptures at Mardan.

decision of Government as to proceeding with the Ranigat explorations. During this time I was occupied in marking and numbering the sculptures that had been conveyed to the magazines, and in selecting the best of the carved stones for photography. Mr. Serrot, photographer of Peshawar, came to Mardan and took 32 photographs for me; most of these (numbered 1 to 32) are represented in the outline drawings which accompany this, and I think Mr. Serrot deserves great credit for his work. The negatives have been sent home for printing by heliogravure, which is a permanent process.

12. When I visited Kusofzai in 1885, Colonel Jenkins drew my attention to the objections to employing companies of Sappers and Miners in explorations. The village people dislike soldiers being quartered on them. Provisions are not abundant, and disagreements are apt to break out.

13. On the other hand, local labour is cheerfully furnished on payment. The inhabitants profit by the work and are quite capable of performing it satisfactorily without either wantonly damaging the ruins or digging or defacing the sculptures when found. There is this additional advantage, too, that the villagers are anxious to point out fresh sites, which they never are in the case of Sappers, whose presence they dislike.

14. From all points of view, therefore, the experiment of utilising the local labour has been a complete success, and fully justifies a continuance of the system. The cost is most moderate compared with the expense of paying for Sappers. Five hundred and three pieces of sculpture of all sizes were procured and landed at Lahore for Rs. 510. This gives an average of a little over one rupee per sculpture, whereas the average in the case of Sapper labour is often much in excess of Rs. 10.

15. I have already submitted some recommendations for the continuance of work through Jemadar Kaleh Khan, and am convinced that by rewards to villagers for bringing in discoveries, and by annual excavations at chosen spots, a complete series of archaeological and artistic evidence will be collected and preserved for the speculation and deductions of the scientific and learned world.

16. Before describing the various sculptures that were unearthed from the buildings, I venture to make some general remarks on the singular character of their architecture and ornament. The first impression given by a mere glance at any of the carvings is the strong influence of Greek art; but when we come to carefully analyse the whole subject, the composing elements are curiously mixed. General Cunningham has described at some length the Greco-Bactrian architecture of Eusofzai, and those who desire to form their own conclusions would do well to study the Archaeological Survey Reports, Vol. II and Vol. V; also to read Mr. Ferguson's chapter on the Gandhara Monasteries in his "History of Indian and Eastern Architecture." Of this, however, it is quite certain that Alexander's invasion of India left a strong impression on the art of Northern India. The use of Greek forms of ornament became general in the Cabul Valley, in the Upper Punjab, and in Kashmir.

Alexander's invasion of India.

17. The Corinthian order reproduces itself all over Eusofzai, the Doric order in Kashmir, and the Ionic order at Taxila (Shahdri, between Attock and Rawalpindi).

18. But Alexander had conquered Persia before he penetrated to the Indus, and he seems to have introduced into India a knowledge of the palaces at Persepolis. The Indo-Persian capital is frequently found in Eusofzai; it occurs also in Madras at Amravati, in Bombay in the Beda and Karli caves, in Bengal at Buddha Gaya, and in Central India at Bharhut and at Sanchi.

19. Whether Persian and Greek art had made itself felt in India before Alexander's time is hard to say, as our previous knowledge of the country is at present so meagre.

20. The Fort at Ranigat has all the appearance of great antiquity; the walls are very massive, and constructed of large blocks of brown granite laid carefully as headers and stretchers. Many of the stones are over 5 feet in length, and mortar of very great hardness is used; but instead of being pointed, the joints are filled with thin slabs of stone or slate. The main entrance is a pointed archway cut in the horizontal layers of stone walling, and zigzags into the body of the stronghold, probably joining a similar passage on the west of the Fort. The arch, instead of finishing in a point, has a rectangular termination (see sheet No. 4) similar to the section of an ancient Egyptian tomb at Carné¹ dating from many centuries B.C.

21. The Ranigat is a very fine specimen of the Indo-Persian style, and is well worth a visit.

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¹ See Vol. I, Ferguson's History of Architecture in all Countries, page 184.

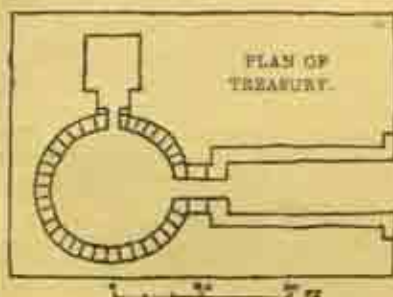
TREASURY OF ATREUS AT MYCENÆ, GREECE.

Circa 1500 B.C.



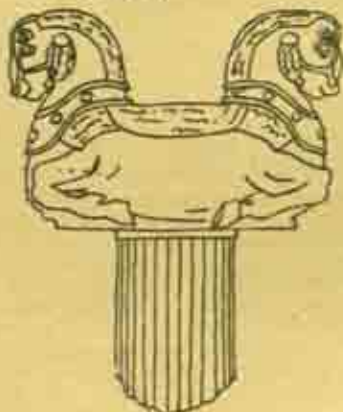
GATEWAY AT THORICUS, GREECE.

Circa 550 B.C.

GATEWAY AT SANIGAT
SUBOPPEAL

CAPITALS FROM THE RUINS OF PERSEPOLIS.

Circa 550 B.C.





21. It might be hastily concluded that the pointed archway at Ranigat is Saracenic, but the interior of the Fort has remains of several Buddhist Temples with sculptures in stone and plaster resembling those ordinarily found elsewhere in Eusofai, and dating from about the commencement of the Christian era. The Ranigat gateway, therefore, completely proves that pointed archways were in use in Northern India before the birth of the Prophet.

22. The antiquity of Ranigat is a subject for speculation. General Cunningham endeavours to identify the Fortress which Alexander captured about 326 B.C., and if this identity could be established its architecture would supply an important sequence to the very early Pelagic art of Greece. The gateway at Thoricos shown in the lithographic plate dates from about 1000 B.C., and resembles the Ranigat entrance in the curvilinear form of doorway, as well as in the horizontal construction.

23. Another circumstance connected with the Greco-Bactrian architecture of Eusofai is the appearance of hemispherical domes built on the principle of horizontal layers. The dome of the Treasury of Artaxa at Mycenæ, which is a very antique example of Pelagic art (see sheet No. 4), is noticed by Mr. Ferguson as that adopted by the Jaina architects in India; and the Treasury or Granary which I discovered among the Sanghao ruins seems to me to form a most important link between the Pelagic Treasuries at Mycenæ and Jaina architecture.

24. But the Sanghao building is important in another respect, as showing that the mode of raising a semicircular dome on a square chamber by corbelling out the corners of the square and forming an octagon found its way to India before either the Jains had commenced their wonderful system of constructing domes over pillars, or the Muhammadans had introduced their elaborate methods of doming over square chambers (see sheets 6 and 7). I know of no other example of a square chamber, corbelled out at the corners and domed over, that is not Muhammadan. It has generally been assumed that a construction such as appears in the Sanghao Granary is to be traced to Muhammadan architects. Here, at all events, is an example which completely upsets the theory. The masonry resembles that used in all the Buddhist monasteries in the neighbourhood, and the building is above, and quite close to, the group of structures where two coins of Kanishka's were found. It is, therefore, tolerably certain that the date is not later than 80 A.D., and may be much earlier.

25. While both Ranigat and Sanghao afford good structural examples of early forms of Greco-Bactrian architecture, Eusofai sculptured bas-reliefs often contain representations of buildings that afford evidence of the constructive methods that were in vogue in the country.

26. One elaborate piece of carving represented in the outline drawing, sheet No. 5, was found by Mr. Dempster, C.E., Executive Engineer, Suez Canal, and he kindly allowed me to have it photographed. In the upper right-hand corner we have a very perfect representation of a hemispherical dome on pillars with Corinthian capitals. Whether the domed roofs represented were of actual lead seems doubtful. The columns below are certainly taken from stone models, and the domes may have been of stone with a lead ornament applied to the surface. A somewhat similar domed building is represented in a bas-relief of the railing of the Bharhut Tole in Central India, the date of which has been ascertained by General Cunningham to be 150–170 B.C. Over the head of the right-hand figure is the Buddhist arch, pointed at the top, but circular inside, and it reproduces what is familiar to us in the Buddhist caves in Bombay—in various Buddhist sculptured and painted representations of buildings and in the monastic Viharas adapted from Buddhist architecture by the Hindus at the Seven Pagodas in Madras. Whether Venice trading with the East got the hint from India or not, the circular archways in the upper part of St. Mark's at Venice (dating from the eleventh century A.D.) resemble this Buddhist arch, and have the same pointed terminations outside. We have also in this sculpture a tolerably perfect representation of a chapel or niche enshrined in a trefoil arch. The column on Buddha's left is distinctly Indo-Persian, as may be seen by comparing the capital with those at Persepolis (see sheet No. 4). Dentils of a classical form enrich the various mouldings, and the rail here used ornamentally is copied from the railings which usually surround Indian Buddhist Temples. General Cunningham has given me the following note:—"The small figure at the top represents Buddha on his horse Chanda (the body of the horse is broken) leaving his home by night. The central figure is Buddha teaching, with a royal figure standing on each side. Below is a row of eight Buddhas."

Mr. Colasme Bellet told me last year of a dome over a Buddhist figure in China, which I think most resembles this.

27. Perhaps the most ornamental architectural features that adorn the Gandhara Monasteries are to be found in the Corinthian capitals of columns and pilasters. General Cunningham brought away a remarkable series from Ruzofai, some of which are in the Calcutta Museum and some in the Lahore Museum.

28. No capitals of any size were discovered in excavating at Sanghao, but a small pilaster is shown in sheet No. 18, and several small bases and capitals of columns were found at the various sites explored in the neighbourhood; all are unmistakably classical, and executed with great delicacy and taste.

29. In the Ruzofai ruins we have, therefore, a basis of indigenous art adapted to the requirements of Buddhist religious ordinance, and flavoured with reflections from the Greek and Persian orders of architecture. Besides this, we have artistic representations, of no mean order, of the Buddhist tales and fables which are associated all over India and Buddhist countries with the life of Gautama.

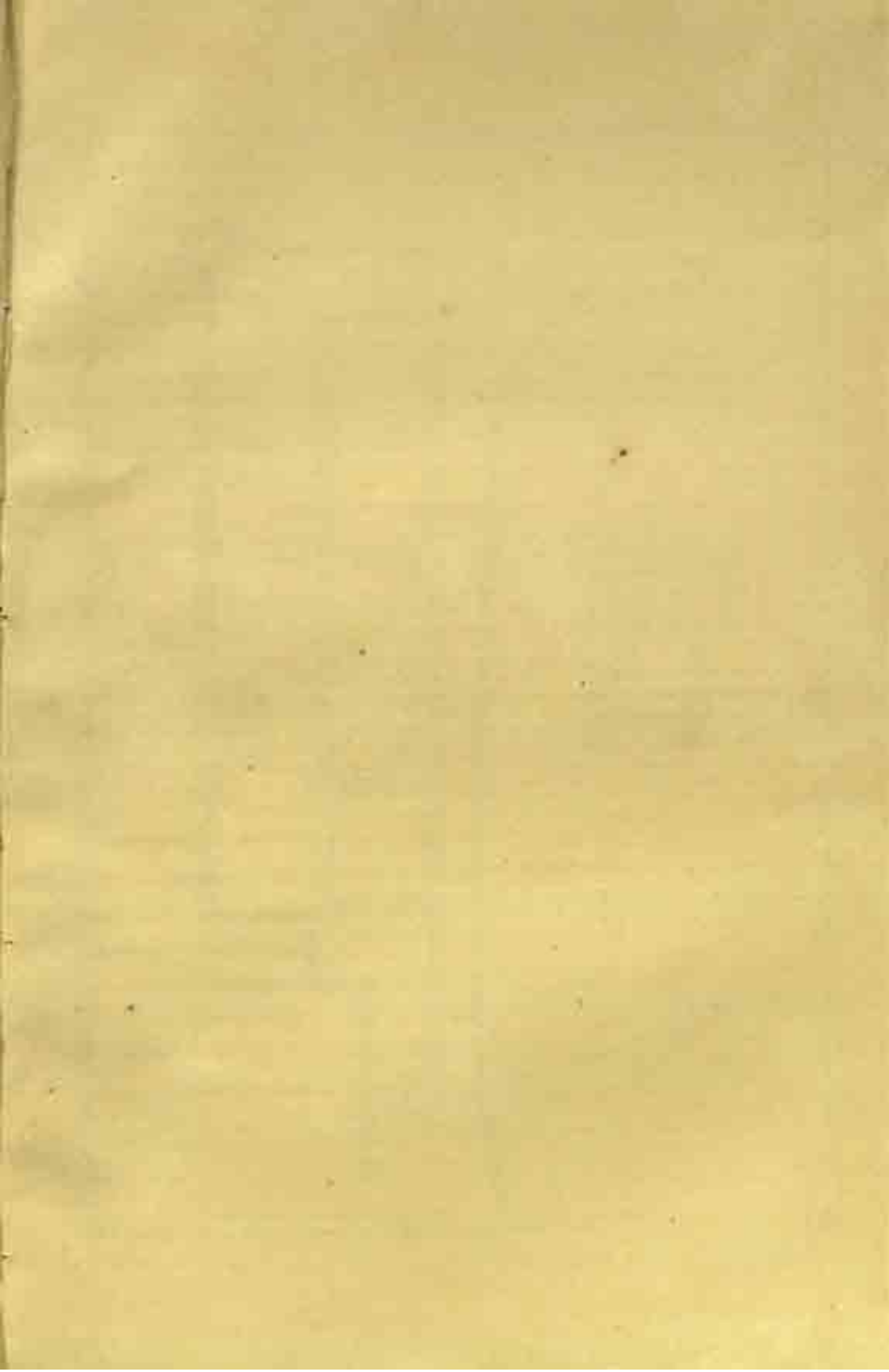
30. As will be seen from the sketch map, sheet No. 1, Sanghao is situated close to the Buner and Swat borders. It is 22 miles north of Mardan, and the road to it passing close to Jamalgiri, enters a gap in the low range of hills near the village, skirts the large village and thana of Kuthung, and passes through new Mian Khan to new Sanghao. Both of the latter villages were moved away from the hills to the open plain as disputes were frequent among the cultivators of the soil about rights in the matter of water for irrigating the fields. The first set of ruins are approached through a beautiful valley beyond old Sanghao. The largest groups of buildings are on steep spurs east and west of a stream of crystal water that flows out of the towering Pujja range of hills. The second group of ruins is about 3 miles to the north at a place called Tangi. The third and fourth groups are on the side of a hill, 3 miles to the north of new Sanghao, at a place called Nuttu; and the fifth and last group is close to old Mian Khan.

31. The exploration of the ruins which abound in this neighbourhood is not by any means exhausted; but Jemadar Kaleh Khan has had great experience in excavations of Buddhist Temples and Monasteries both in Ruzofai and in the Khaiber, and has a remarkably keen nose for a find, so that very little fruitless digging has been done. I hope that all the ruins of the place will be thoroughly examined. It would be most valuable if more coins or inscriptions could be found by means of which to ascertain the precise date of the structures and their remarkable embellishments. Without Colonel Jenkins's assistance it would have been difficult to secure so many sculptures. It was not merely that he lent his Native Officers to supervise the work on the spot, but took a personal interest in it.

32. I am greatly indebted to Major Bell, V.C., R.E., A. Q. M. G., for allowing the outline drawings and plans to be incographed at the Intelligence Branch of the Quarter Master General's Department.

33. I shall now proceed to describe the plates which illustrate this report.

Description of plates.



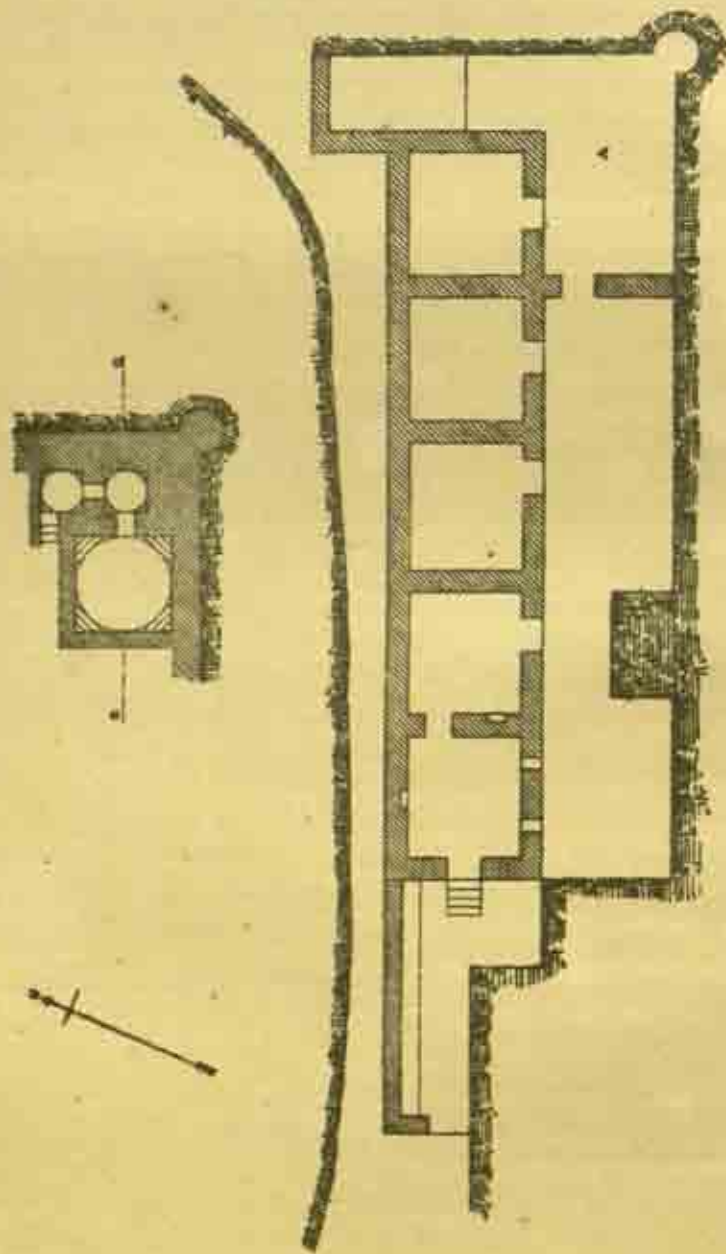
PLAN OF A BUDDHIST HOUSE AND GRANARY
SANGHAO, EUSOFZAI.

Division of Eastern Myanmar

PLATE No. 1.

SHEET No. 6

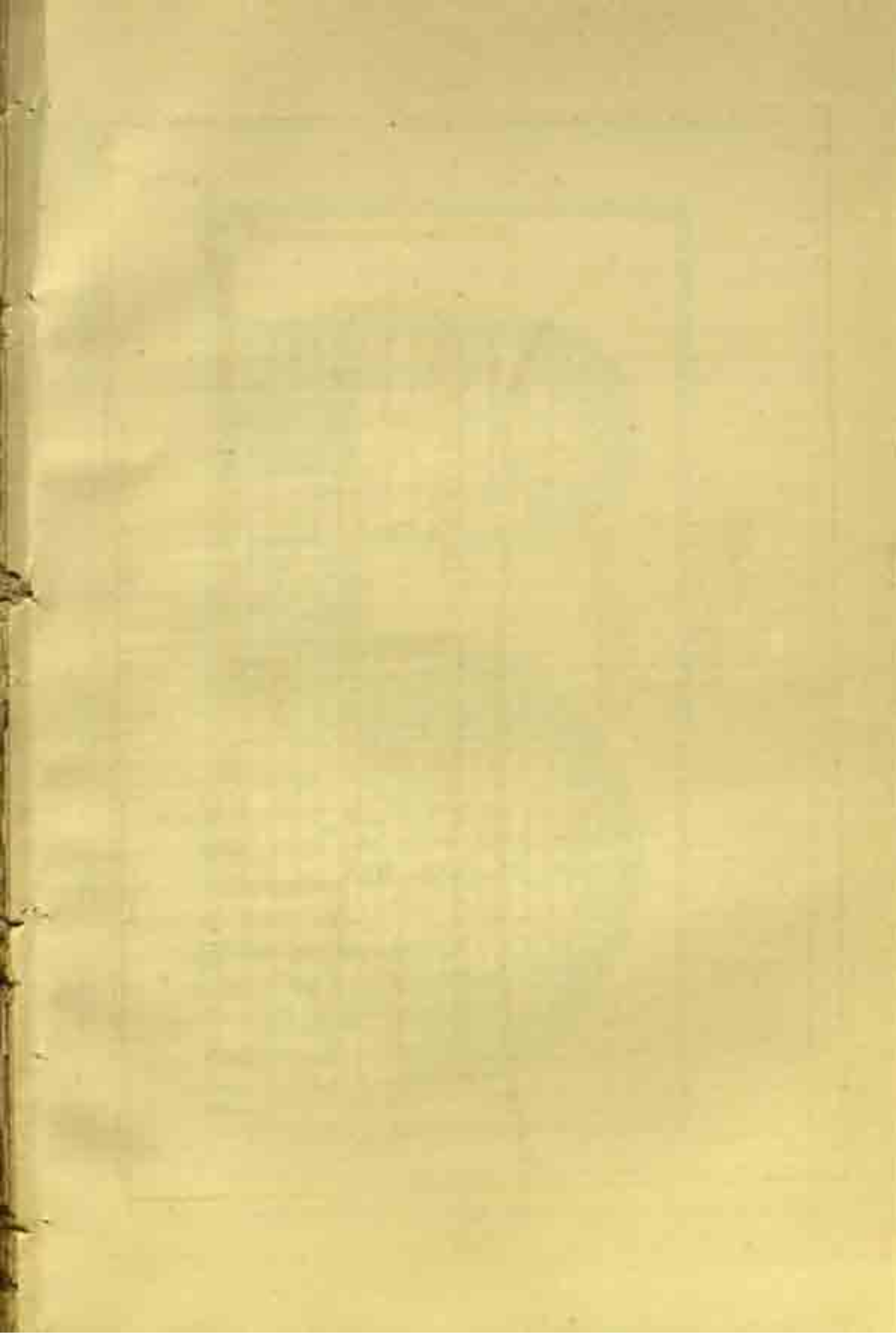
PLAN OF GRANARY BELOW THE TERRACE AT A.



Office of Customs and Excise, Mandalay. Measurements taken by Captain A.H. Smith, 1904.

40 FEET

Photographed at the Library of the British Museum, London.



SECTION THROUGH THE DOMED GRANARIES (SEE B.C.) PLATE NO. 1
SANGHIAO, EUSOFZAI.

Excavation of National Monuments.

PLATE No. 3.

FIGURE No. 7.

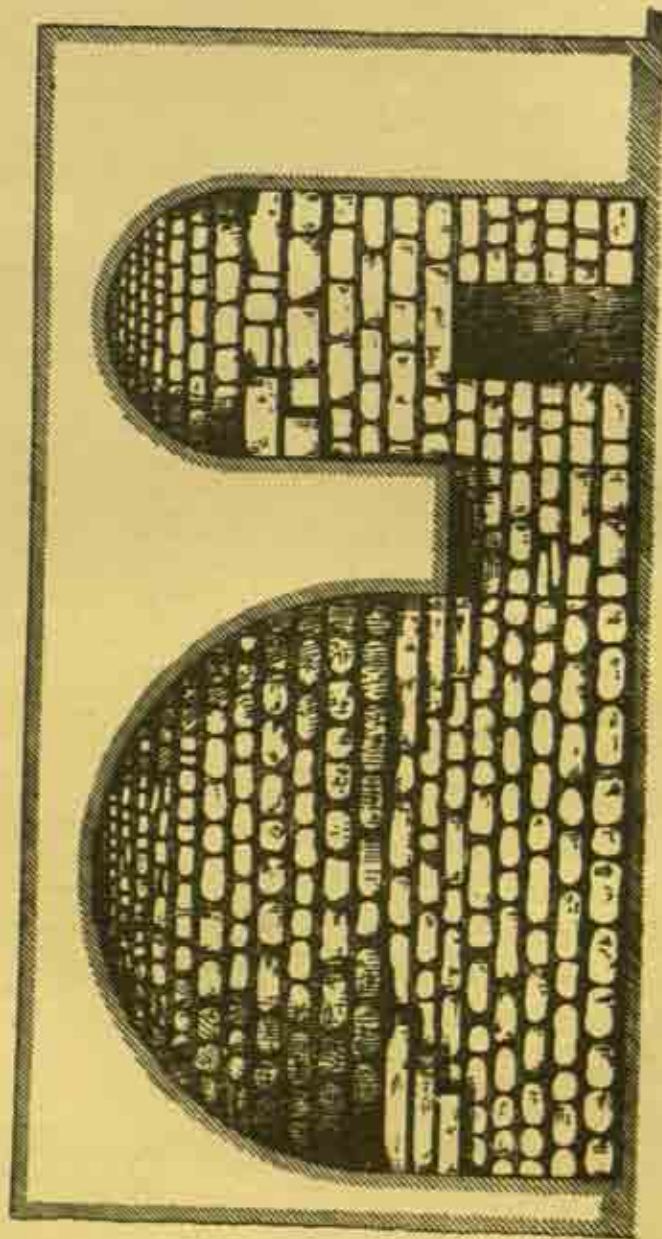


FIGURE No. 3. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Office of Governor of Alameda Department. Measured and Drawn by Henry All. March 1901.

Photolithographed in the Survey of Public Offices, Alameda.

(SHEETS 6 AND 7.)

1. Plan of Buddhist house and granary at Sanghao.
2. Section through domed granary.

34. As I have just mentioned, this building affords an ancient example of domes constructed out of horizontal overlapping layers or rings. We find its earliest prototype in the Treasury of Atreus at Mycenæ (see sheet No. 4). The Jains used this construction in their temples, and to this day the most elaborate and beautiful ornamentation. Besides the peculiar construction of the dome, the mode of corbelling out the corners of the square chambers, to form an octagon on which to place the first ring of the dome, is in use all over India in Muhammadan buildings. Until I saw the Sanghao Granary I believed this method to be essentially Muhammadan, but there can be no doubt that the Granary is Buddhist and contemporaneous with the Sanghao Monastery below, in which the two Kanishka coins were found and which, therefore, dates from about the beginning of the Christian era. I have called the building a granary because four ancient millstones for grinding corn were found in excavating the chambers. It may have been previously used as a treasury. The masonry of the walls and domes is strongly built, and most carefully pointed with thin slabs of slate and stone. The only communication is by a door and flight of steps, and the three-domed chambers were thus very securely shut in. No carved images or fragments of sculpture were found at this site.

(SHEET No. 8.)

Plate 3. Plan of Buddhist Monastery near Sanghao.

35. This is the first building that was excavated. The basement where the sculptures were found is earlier and more oblique than the surrounding walls and upper story. I marked and numbered the discoveries with the letter S 1 to 134. [Including an earthenware lotah.]

Sanghao Monastery.

36. Two copper coins and a brass ring were found in the Treasury in earthenware jars

Kanishka coins.

embedded in the floor at the corners A and B. The coins are those of Kanishka, General Cunningham has been good enough to examine them and to give me the following description:—"Both of your coins are of King Kanishka, whose name is always spelt Kanerki on his coins. On the obverse of both is the king standing with his right hand pointed downwards to a small altar, and his left hand raised and holding a spear. The inscription of which only faint traces now remain is "PAO KANERKI." On the reverse of one is a male figure standing, with his left hand on his hip and his right hand holding out a wreath. Inscription nearly obliterated "A 20," or the God of Fire. On the reverse of the other there is a running figure, holding up his robe with both hands. Part of the inscription still remains "0A20," which is the Zend for wind, and the figure represents the God of the Wind. The date of Kanishka is still unsettled, but I am satisfied that he must have been reigning from about 85 to 120 A.D." It may therefore be conjectured that the buildings and decorative sculptures of this monastery date from about the beginning of the Christian era.

37. The stone figures and fragments were found at the places marked C. A few plaster figures were found at the places marked D on the basement plan. All the sculptures are marked S and numbered.

Sanghao sculptures.

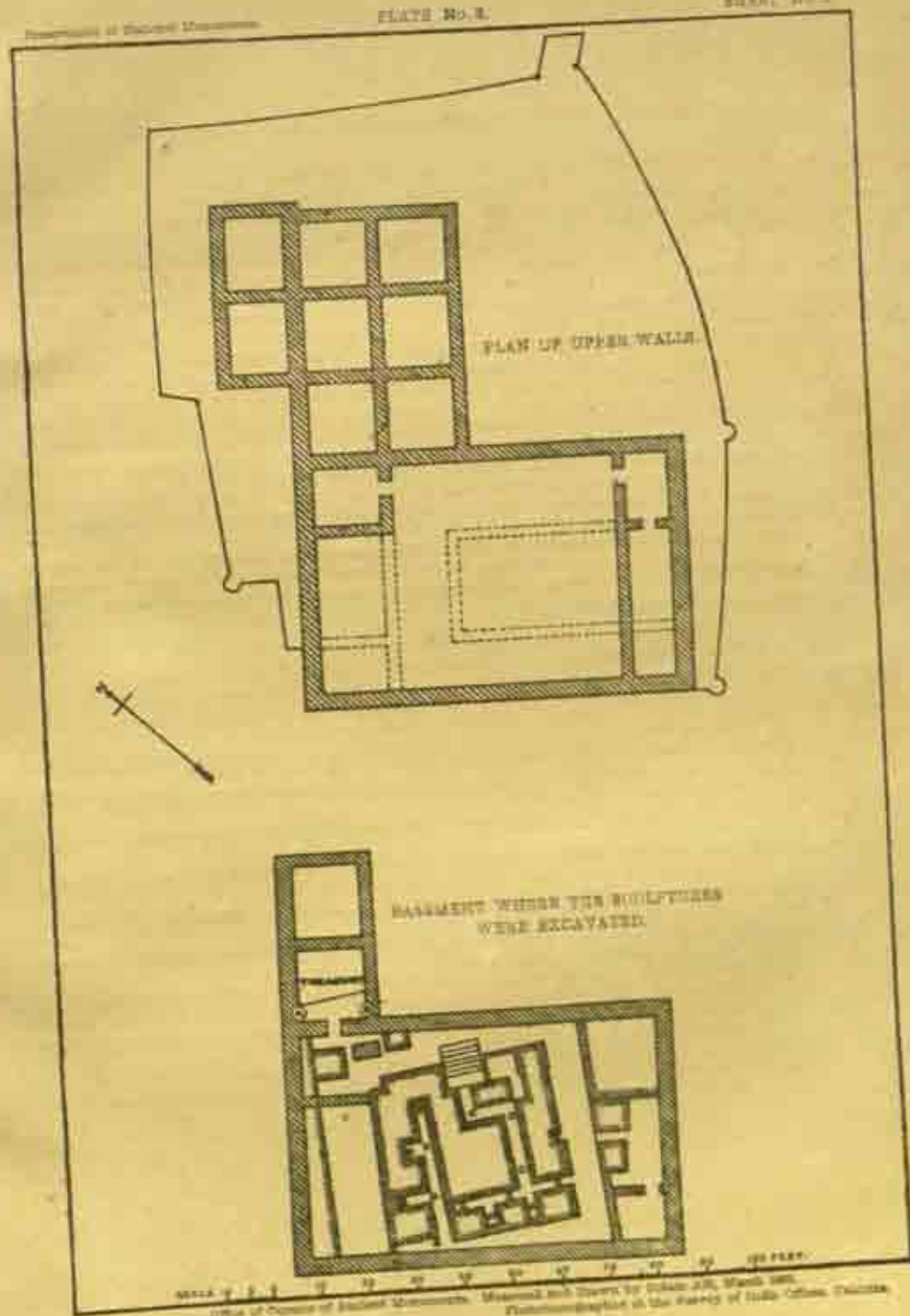
They comprise 134 pieces of all sizes:—

- (1.) Circular frieses of figure subjects that adorned the small Töpe.
- (2.) Panels of Buddha and worshippers used in plinths or entablatures.
- (3.) Two figures kneeling and supporting a superstructure or entablature. (These resemble the attitude of Atlas supporting the earth.)
- (4.) Two Corinthian capitals of isolated pillars.
- (5.) Fourteen terminal figures of lions, and one figure of an elephant.
- (6.) One complete panel (rather weather-worn) of the birth of Buddha.
- (7.) Numbers of small square pilasters with Corinthian capitals and figures carved on the shafts.
- (8.) One circular disc with a sculptured edge, probably used to surmount one of the small Töpes.
- (9.) A carved knob rudely representing the figure of a woman in the talons of a flying eagle. (For similar subject, see sheet No. 14.)
- (10.) Two fragments of a circular frieze—Boys supporting a garland. (For similar subject, see sheet No. 23.)
- (11.) A fragment of a figure: subject—A woman in the foreground looking at herself in a glass held in the left hand.
- (12.) A fragment of a woman in the talons of an eagle. (The eagle is headless.)
- (13.) Fragment of a figure: subject—Standing figure (like a Grecian warrior) with a spear and shield. A man kneeling over a prostrate figure. A standing figure in an attitude of supplication.
- (14.) Several figures in a doorway. Figures above looking over a battlement.
- (15.) Figure of a woman in the talons of an eagle. (For similar subject, see sheet No. 14.)

PLAN OF BUDDHIST MONASTERY NEAR SANGHAI,
KUSOFZAI.

PLATE No. 3.

SHEET No. 3

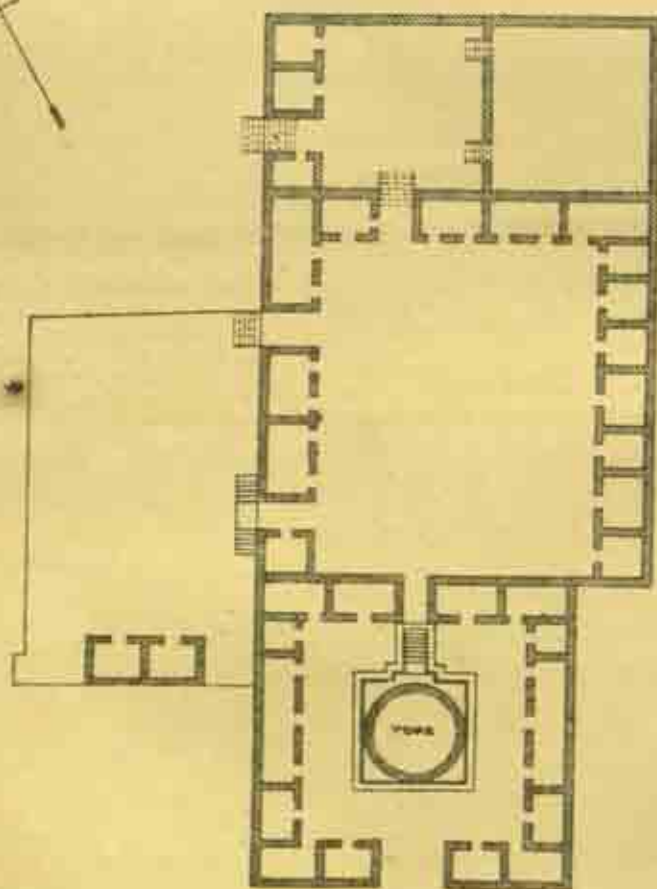


PLAN OF BUDDHIST MONASTERY AND TOPE AT TANGI
NEAR SANGHAD, GUSAFZAI

Figure 4. The effect of the concentration of the inhibitor on the rate of polymerization.

PLATE 20C

INTEREST 542.4.



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Office of Director of Federal Investments, Montreal and Ottawa by Ottawa, 20, March 1931.
Photocopy made at the Library of the Office, Ottawa.

(SHEET No. 9)

Plan No. 4. Plan of Buddhist Monastery and Tope at Tangi near Sanghao.

38. The buildings at Tangi are important in respect at least of their size. The Tope, which rests on a square basement, was laid bare, but only a few plaster images were discovered, and the plinth found to be faced with plaster. A shaft was sunk in the centre of the Tope, but no relics were obtained. As the earthwork was very heavy, and no stone sculptures were unearthed, the place was abandoned. It is possible that some of the chambers shown on the plan were used as chapels, and a further search is desirable, by clearing the buildings of the accumulations of earth.

(SHEET No. 10.)

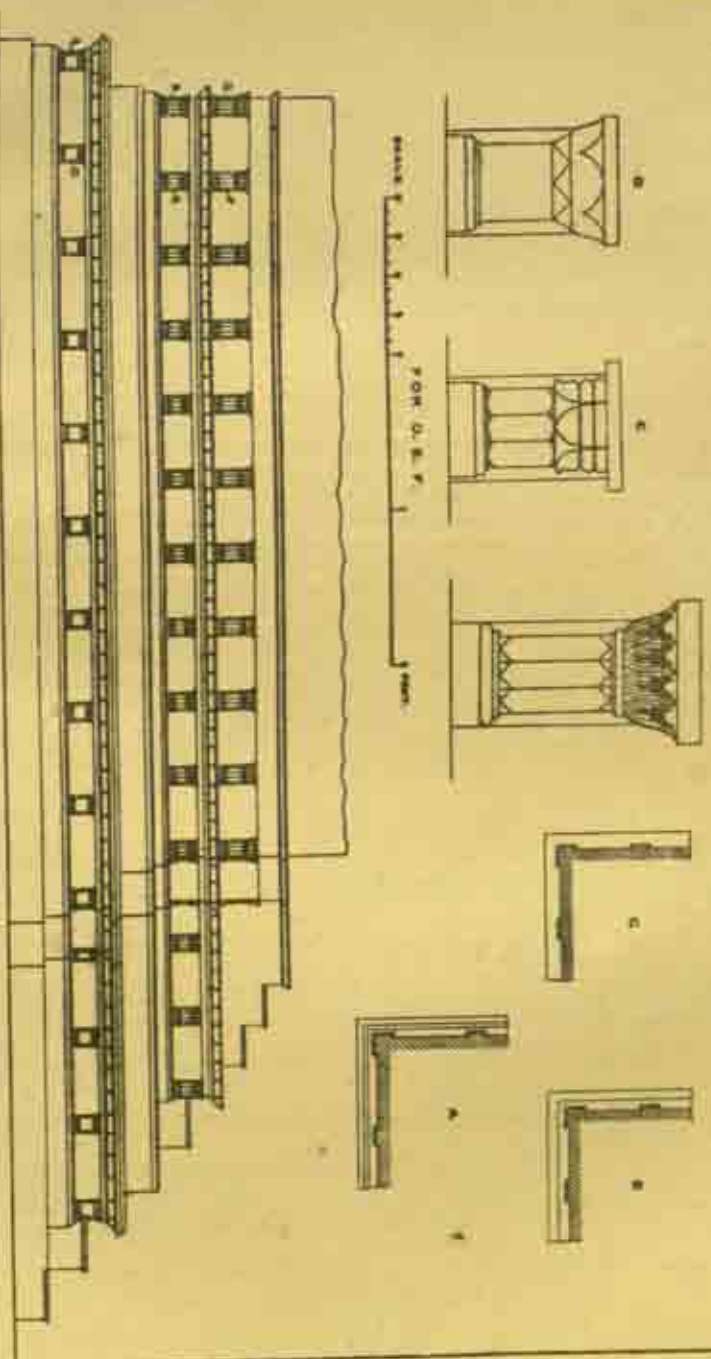
Plan No. 5. Basement and details of the Buddhist Tope at Tangi near Sanghao.

39. From the size of the Tope some more important results were to be expected, but if nothing else, the building laid bare affords a good idea of the architectural treatment in vogue. The plinth is faced with plaster and decorated with ranges of pilasters, in the same way as occurs at the Shilah Posh Tope at Jellalabad, where Jemadar Kulch Khan was at work during the Afghan war. The coarseness of the mouldings and capitals in the Tope rather indicates that Tangi was a monastery of the second or third order, but of this it is impossible to speak with certainty until the whole site has been explored.

BASEMENT AND DETAILS OF A BUDDHIST TOPE AT TANDI
NEAR SAMOHIA, EUSOFZAI.

PLATE No. X.

Sheet No. 11.

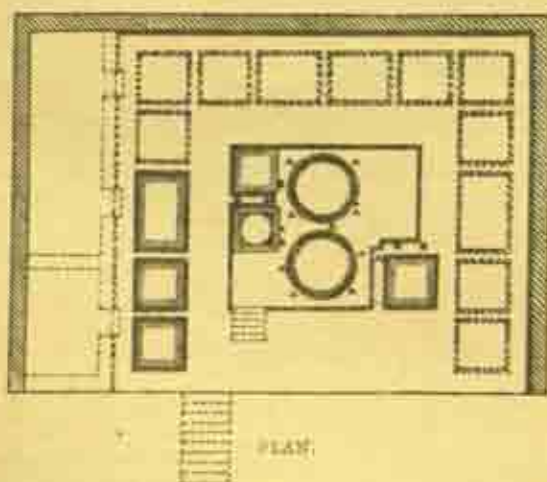
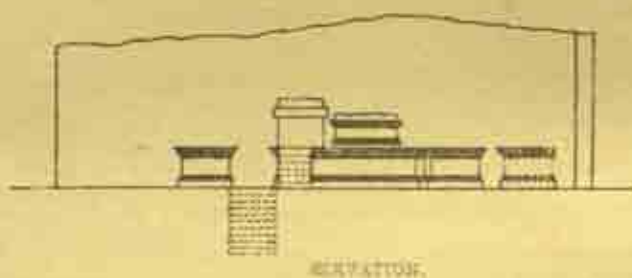


PLAN AND ELEVATION OF UPPER BUDDHIST MONASTERY
AT NUTTU NEAR SANGHAO, EUSOFZAI.

Conservation of National Monuments

PLATE No. 5

SIEMY No. 11



SCALE OF 0 5 10 20 30 40 50 FEET.

Office of Charge of National Monuments. Measured and Drawn by Victor A.H. March 1928.

Published in part by the Survey of India Office, Calcutta.

(SHEET No. 11.)

Plan and elevation of the Upper Buddhist Monastery at Nuttu near Sanghao.

40. Although covering a small area of about 80 feet by 60 feet, this site yielded some very interesting and elaborate sculptures in stone, most of which were found at A A A round the two small central Tòpes. Pieces of plaster figures, &c., were found at B B B. All are marked N. U. A total of 79 large and small fragments brought away, including those more particularly described, consist of the following:—

- 1 to 4. Figures of dancing-women under a tree (see sheet No. 19).
5. A seated figure of Buddha.
- 6 to 10. Sundry figures.
- 11 to 19. Square pilasters with Corinthian capitals and figures on the shafts.
- 20 to 27. Small figures supporting a superstructure in a position resembling Atlas.
- 28 to 36. Seated figures of Buddha and surrounding attendants or worshippers. (In No. 35, Buddha is represented *with moustaches*, the only example that General Cunningham has yet seen.)
37. Long frieze (see sheet No. 18).
- 38 to 43. Fragments of terminals, five with lions' heads.
44. Base of capital.
45. Part of Corinthian capital with a figure of Buddha.
46. Niche (see sheet No. 19).
47. Frieze, relic Tope and fire altar (see sheet No. 18).
48. Death of Buddha. This is well carved, and has a pilaster on each side.
49. Niche or chapel. In the centre compartment is a representation of Buddha's turban and hair which he cut off before entering Buddhahood.
50. Worship of Trisul emblem and flag (see sheet No. 24).
51. Frieze with horses (see sheet No. 25).
52. Birth of Buddha (see sheet No. 17).
- 53 to 79. Fragments of friezes.

(SHEET No. 12.)

Plan (No. 7) of the Lower Buddhist Monastery at Nottu near Sanghao.

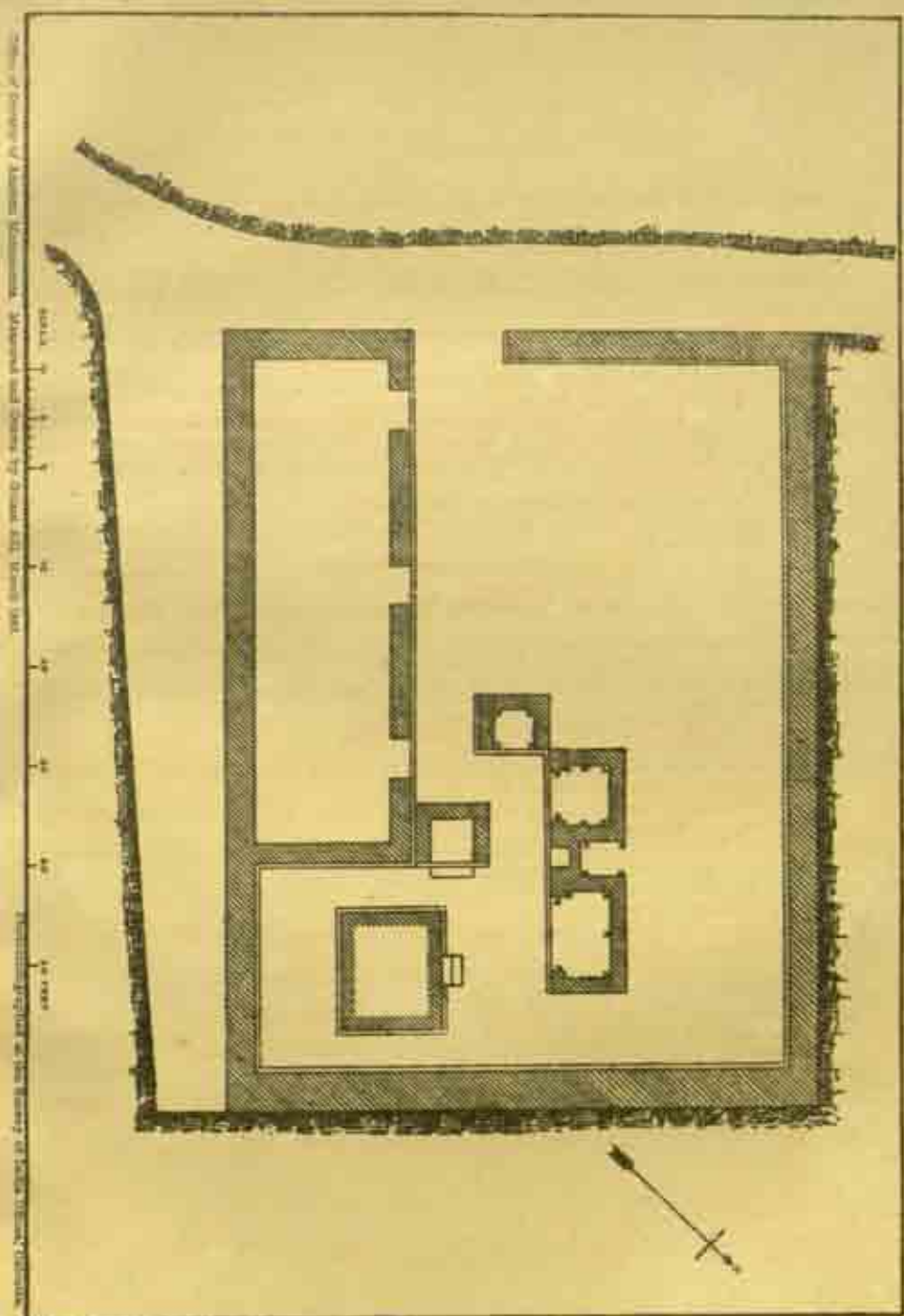
41. The hill had fallen and overwhelmed this group of buildings, but the three small chapels that were excavated yielded 76 pieces of stone sculpture and 7 plaster heads, which were removed; but besides these, there were many plaster figures attached to the walls at places marked B B which it was not worth while to remove. The stone carvings were found at places marked A A, and were all marked N. They are generally as follow :—

1. A horse-shoe niche or chapel (see sheet No. 19).
2. Death of Buddha (see sheet No. 22).
3. Part of a niche or chapel. King and Queen on a couch (apparently the same persons as represented in sheet No. 19), musicians in an end compartment, one woman playing the harp, one playing what looks to be a guitar or "Bina," and a figure thumping a big drum.
4. King and Queen seated in a palace (see sheet No. 20).
5. A standing figure of Buddha with attendants, and a prostrate figure at his feet. A castle on the left.
6. A kneeling figure supporting a Trisul (see sheet No. 21).
7. A kneeling figure worshipping a garland.
- 8, 9, 17, and 18. Parts of friezes of standing figures some with a nimbus encircling the head.
- 10 and 19. Parts of friezes of standing figures with halos and umbrellas of state over them.
11. Panel of a seated Buddha and worshippers.
12. Part of a circular frieze with two panels between columns of seated Buddhas, each with two worshippers.
- 13 and 24. Parts of circular friezes—Boys and garlands.
14. Part of a circular frieze (see sheet No. 23).
- 15 and 16. Fragments of circular friezes—Panels with figures between pilasters or columns. In one panel is a representation of a Tope or Stupa.
20. A seated figure of Buddha—Boy with a plough and pair of bullocks on the left. In the rear is a man and horse.
21. King and Queen in a palace seated on a throne, with their feet on stools. An ascetic is seated on a stool to the left; on the right is an attendant.
22. Seated Buddha in a horse-shoe niche.
23. Seated Buddha in a trisul niche.
- 24, 26, 29, 33, 34, 35. Friezes of small figures under horse-shoe arches with intermediate Indo-Persian columns.
- 27, 28, 30, 32. Fragments of a circular frieze, with standing figures.
31. Straight frieze of small figures standing.
36. Part of an Acanthus capital, and seated figure of Buddha in the centre.
- 37, 38 and 39. Parts of a Ten which surmounted a Tope; the wheel is about 15 inches diameter.
- 40 to 43. Fragments.
44. Base and feet of a standing figure; sandals are on the feet, with a large button between the big and next toe.
- 45 to 79. Fragments of stone sculptures, not including 7 plaster heads.

PLAN OF THE LOWER BUDDHIST MONASTERY AT NUTTU
NEAR SANGHAI, EUSOPZAI.

PLATE No. 7.

Sheet No. 12.



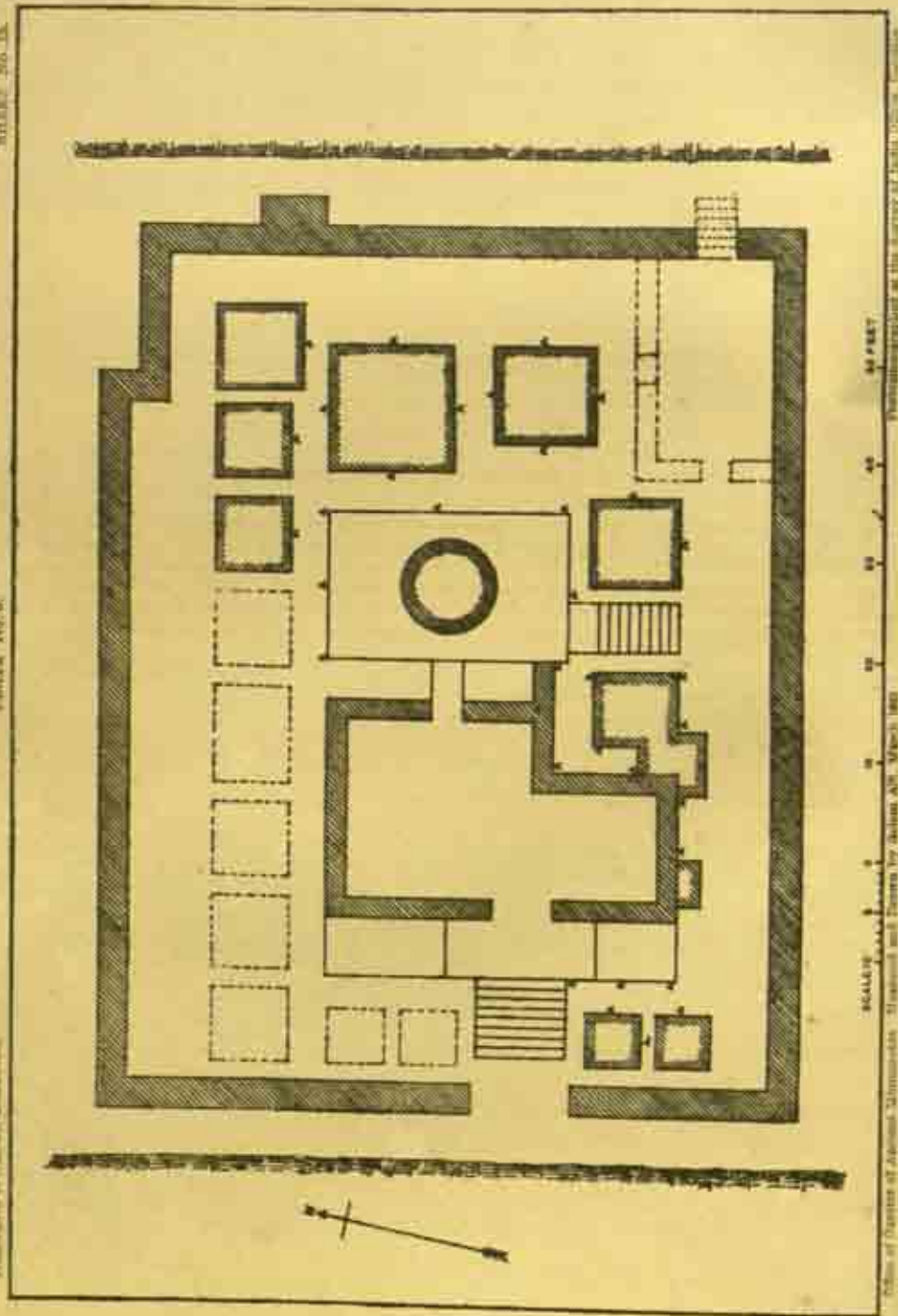
Scale of Feet of Indian Measurement. 0 20 40 60 80 100. Enclosure proper on the right of the main enclosure.

PLAN OF A BUDDHIST MONASTERY AT MIAN KHAN
EUSOFZAI.

Preservation of National Monuments.

PLATE No. 8.

SHEET No. 13.



Scale 0 10 20 30 40 50 FEET
Drawing prepared at the Survey of India Office, Calcutta.

(SHEET No. 13.)

Plan (No. 8) of a Buddhist Monastery at Mian Khan.

43. This must have been a place of importance, and yielded a considerable number of fine sculptures. The site was broached after my visit of inspection in March, and I only saw 35 of the sculptures which were brought into Mardan before I left. There are some 270 more pieces for me to examine. Judging from the plan, there should have been about eighteen small Topes, most of them on square basements, in the enclosure. The sculptures were discovered round the plinths at places marked A A.

(SHEET No. 14.)

Woman and Eagle, Plate No. 21.

43. This is a very curious piece of sculpture from the Sanghao buildings (see plan 3, page 11).

As already mentioned, the subject occurs in a small stone knob found among the same ruins, and a similar, although more broken, sculpture was unearthed at the same place. The subject occurs again in a fragment dug up at the Upper Monastery at Nattu. The representation is evidently traceable to some legend, probably local. General Cunningham is unable to say what the meaning is, but only guesses that the figure is Maya, the mother of Buddha, being carried up to the Trayastrinsha Heavens after her death, where it is said she was "born again."

[NOTE.—The subject, General Cunningham now tells me, is suggested by the famous statue of Ganymede being carried off by Jupiter's Eagle (see statue of Ganymede after Loochans in the Vatican, illustrated in Vol. I, *Lubbock's History of Sculpture*, page 197).





(SHEET No. 15.)

Buddha and Ascetics, Plate No. 23.

44. This is part of a frieze with pilasters at intervals found in the Sanghao ruins (see sheet No. 11). The stone has become very much decayed on the surface. The subject, General Cunningham tells me, is the visit of Buddha to the emaciated Tirthika Uruvilwa Kasyapa, an ascetic, who lived in a forest of baobab trees. On Buddha's left is his cousin, the evil-disposed Devadatta. Beyond Uruvilwa is a very life-like figure of an ascetic bowed down in contemplation.

(SHEET No. 16.)

Buddha and Nagas, Plate No. 24.

45. A roughly executed bas-relief found in the Sanghao ruins (see sheet No. 11)

Buddha and Nagas. S.

which, like the preceding, is probably one of the subjects placed between pilasters in a frieze surrounding the *torus* of the Monastery. It represents Buddha visiting a king and queen of the Nagas; Devadatta, Buddha's hostile cousin, stands on the left of the saint with the usual thunderbolt, or whatever the symbol is that he has in his hand. The meaning of the scene is probably that Buddha has been entrapped by Devadatta into visiting the Nagas, here represented with snakes above their heads. As in similar fables, the divine influence is too strong, the Nagas fall down and worship him instead of doing the wished-for harm. Devadatta, enraged at his want of success, bolts up the mountain. The Nagas are represented as being in water.



(SHEET No. 17.)

Birth of Buddha, Plate No. 14.

46. A broken portion of one of the panels which probably found a place between pilasters in the plinth of the *Tôpes* of the Upper Monastery at Nattai.
Birth of Buddha. N. U. A complete bas-relief representing the same subject was unearthed from the monastic buildings at Sanghao. The subject is of special interest in the history of Buddhism, which General Cunningham at once identified as the Birth of Buddha. The right half of the panel is wanting. On Maya's right should be Brahma receiving the young prince who was born from Maya's right side, and beyond him Indra with a second attendant. The child, with a halo round his head and the cloth held by Brahma, can be made out. Maya is standing under a *sâl* tree; her right hand is raised and holding one of the branches; her left hand is round the shoulder of her sister. To the extreme right of the panel is a female attendant with a *chaori* of state, and above is a harp signifying heavenly music.

(SHEET No. 18.)

Selection from Plates 9, 13, and 15.

47. All these sculptures are from the Upper Monastery at Nattu (see plan 6, page 15).

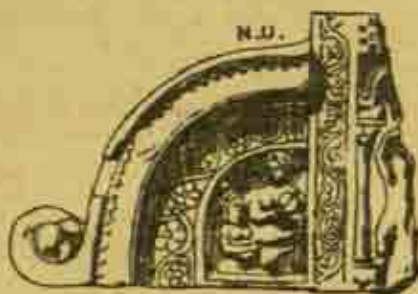
Plates 9, 13, and 15.

The sculpture on the left is one of a group in plate 9, and represents a pilaster with a Pilaster. N. U. Altar. Prieze. N. Corinthian capital and a foliated base, found at the Upper Monastery at Nattu. There are three standing figures carved on the surface of the shaft—Buddha in the centre, an attendant with a chaoi on his right, and Devadatta on his left. Several similar pilasters were obtained at the same spot, and were no doubt used round the plinth of one of the Topes to alternate with panels of seated Buddhas and worshippers, numbers of which were also dug up, and correspond in height.

The long panel of vines and boys forms the subject of plate 13, and is the only one of its class found in the Sanghao neighbourhood. It appears to be more ancient than the other sculptures procured from the Upper Monastery at Nattu (N. U.), and certainly resembles the Byzantine ivory carvings which Mr. Fergusson thinks bear a strong resemblance to many of the Gandhara bas-reliefs. There can, however, be very little doubt that the age of the Nattu structures is as early as those at the Sanghao site, *i.e.*, about the commencement of the Christian era; but if this is the case, the art of Constantine's time must have taken expression after the Kusofai structures were built. The subject represents a general feast on grapes. In the centre two boys are struggling for a bunch. On the right is a goat or some animal, and beyond a boy eating. On the left of the centre is another boy quietly engaged in the same occupation. The whole panel is curiously antique looking in the rendering of the figures and leaves, but is not without a certain degree of life-like representation.

Plate No. 15 represented at the top is part of a circular band or frieze found at the Upper Nattu Monastery, and surrounded one of the small Topes. The panels are separated by small columns. The one to the right represents a fire altar or funeral pile. The fire is being fed by two Buddhist monks pouring oil out of *ghasas*. The left panel represents the worship of relics, probably funeral relics, by two shaven monks. These are the only two scenes of the kind that I have seen yet in any Buddhist sculptures in India.





(SHEET No. 19.)

Selections from Plates 8, 11, and 26.

48. Plate 8 contains four pieces of sculpture, out of which two are here outlined. The

Plates 8, 11, and 26. Mountain in
water. N. U. Buddha standing on
water. N. U. Figure of dancing-woman.
S. U. Supporting figure. N. U.
King and Queen gambling. N.

first, from the Upper Nuttu Monastery, is a fragment of a chapel or niche representing two women, one playing a drum and the other a harp. Although it has not come out distinctly in the drawing, the latter has something in her hand which may be a "plectrum," similar to what is shown in the Bharhut sculptures as being used to sound the ancient harp. The small drum is beaten by a stick and not with the hand.

The floral and foliated borders are similar to those to be seen on the Sanchi Gates, and may be traced back to Grecian ornament employed in the monument of Lysicrates at Athens (B. C. 334).

The second sculpture, taken from plate 8, is also from the Upper Nuttu Monastery, and is that of a dancing-girl beneath a tree, a bough of which she is holding with her right hand. There are three other similar figures from the Upper Nuttu Monastery—one holding a bough with her right hand, the other two holding boughs with their left hand. It would thus appear that they adorned the two sides of a niche or some important sculptured composition. The two holding with the left hand have their left leg crossed over their right, and those holding with their right hand, their right leg crossed over their left. It is a symmetrical ballet in stone only two thousand years old! The figures are draped about the body as well as about the limbs. They all wear girdles of four rows of stones suspending a leaf, anklets on both feet, a necklace as well as a necklet, and bangles on the wrist. The hair is waved over the forehead, and plaited into a sort of wreath over the head, finished by two knobs. They all wear tolerably large pendant earrings. The pose of the body is in each not wanting in grace.

Plate No. 11.—A set of eight pieces of carved stones were grouped for this plate, and two of them are here depicted. The first is a panel of Buddha surrounded by worshippers. The peculiar halo or nimbus of flame round the head of the saint, and his standing on water, represent his power over the two most potent elements. The second sculpture from plate 11 is also from the Upper Nuttu Monastery, and consists of a figure bowed with the weight of the superstructure he is carrying on his shoulders. At Persepolis figures are found supporting plinths with uplifted hands. The Caryatide figures of Greece support on their heads in place of columns. The Telamones are another form of this kind of support; but all these are erect, whilst the Euseizal human supporting figures are all crouched or kneeling in an Atlas-like attitude.

Plate No. 26 represents part of a niche or chapel from the Lower Monastery at Nuttu. The Lower part is shown in the drawing. A King and Queen seated at a small table engaged in gambling. The Queen is seated on a stool with her feet on a footstool. The King is on a throne, his feet also on a footstool. The right arms of both are on the table, the left arm of the Queen is uplifted as if throwing dice. In the background are two female attendants with chalice. The King has a sort of jewelled plume in front of his turban. General Cunningham describes the upper part of the niche (not here represented) as containing Buddha's alms-bowl under an umbrella as an object of worship.

(SHEET No. 20.)

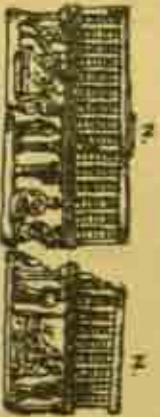
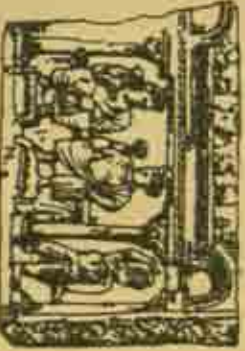
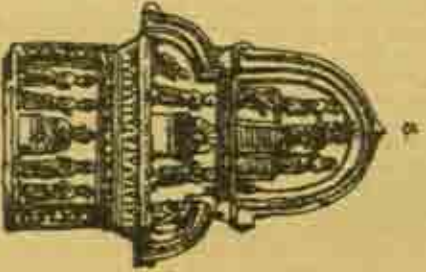
Group of Sculptures, Plate No. 20.

49. This is a group of six different pieces of sculpture: the three upper pieces are from the Sanghao Monastery (see sheet No. 11); the three lower pieces are from the Lower Nuttu Monastery. The fragment on the left represents Buddha on a throne supported on lions. He is surrounded by numerous supplicants. The centre sculpture is thus described by General Cunningham:—

"Representation of a chapel or small temple. In the upper part of it is the famous triple ladder or flight of steps by which Buddha descended from the Tāvātisāvatī heavens, accompanied by the gods Brahma and Indra. At the foot of the steps is the nun Pandarika who had been changed to a man by Buddha, who was aware of her wish to see him."

The sculpture to the right represents a standing figure of Prince Siddhartha with an umbrella over the halo round his head. The woman on the right is probably his wife, whom he is about to desert in order to become an ascetic. The left lower sculpture represents, says General Cunningham, Prince Siddhartha and his wife Yasodara. They are seated on a throne in a palace. The Princess has a wreath in her left hand. Columns with Corinthian capitals support circular arches on each flank. Several figures are represented in an upper gallery. The other pieces of sculpture in the right corner of the plate are part of a frieze, the upper part of which is a representation of torse railings. The lower part, divided into compartments by columns, represents the Nirvana of Buddha, and a fire altar, which may be his funeral pile.

NOTE.—Buddha had been up to heaven to convert his mother Maya and descended to earth at Sankhassā (in the Blak District, North-Western Provinces). "In the middle is the head-dress of Buddha (the famous Chhatra Muni) which was carried to heaven by the Devas and worshipped."



(SHEET No. 21.)

Symbol Worship, Plate No. 3.

50. The sculpture is from the Lower Nattu Monastery (see sheet No. 13). The subject does not occur often. General Cunningham describes it thus:—

"A party of shaven-headed monks paying adoration to the Dharma-chakra, symbol of the wheel, which is surmounted by the Tri-ratna, or symbol of the 'Three Gems,' above which are three wheels or Dharma-chakras."

The attitude of the supporting figure with uplifted right hand is very like Atlas.

(SHEET No. 22.)

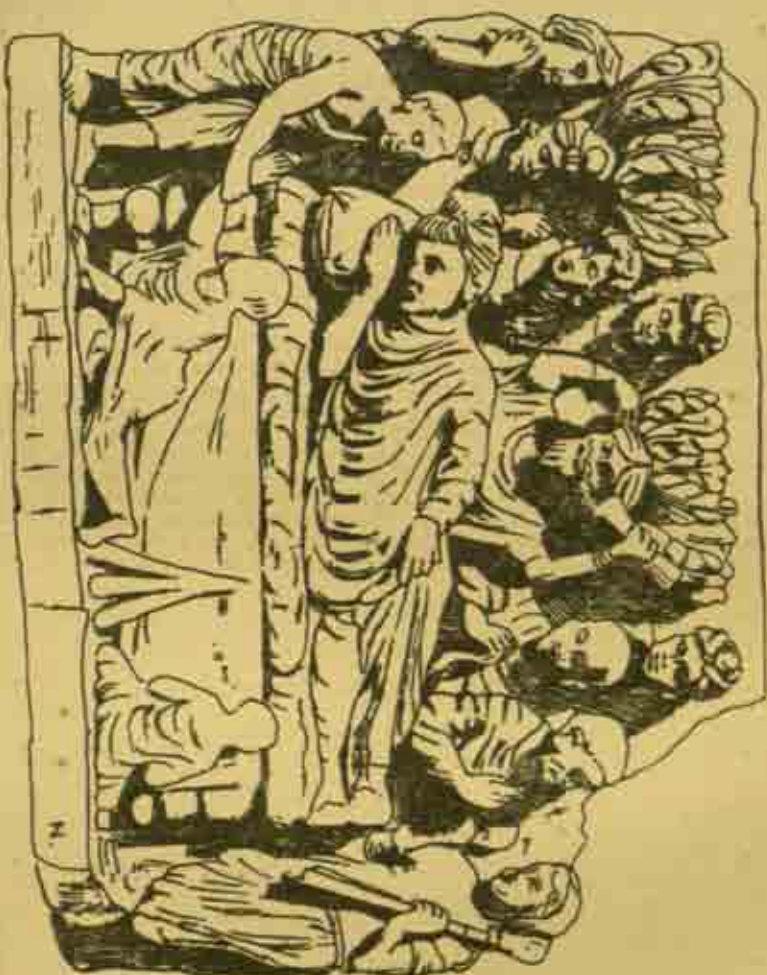
Death of Buddha. Plate No. 5.

51. This is from the Lower Monastery at Nattū (see sheet No. 12).

Plate No. 5. Death of Buddha. N.

General Cunningham has been good enough to furnish me with the following descriptive note:—"Nirvana of Buddha in the middle. Behind Devadatta, with beard and staff—the shaven men at the feet are monks, Buddha's disciples. The men at the head are the chiefs of the Mallians. The prostrate figure being raised by a monk is probably one of the disciples who fainted when he saw Buddha die." The bed on which Buddha is lying might be a modern charpoy, and the presence of a mattress and pillow show that civilisation in the first century A.D. was more advanced in India than it was in many Western countries at the same period.

A piece of sculpture in rather higher relief representing the same scene was found at the Upper Nattū Monastery. It is between two pilasters with Corinthian capitals. Close to Buddha's bed is a tripod from which suspends what looks very like a modern soda-water bottle, but which was probably a porous vessel used for cooling the drinking-water of the saint in his dying moments.





(SHEET No. 23.)

Garland frieze, Plate No. 4.

52. Fragment of a circular frieze from the Lower Natta Monastery (see plan 7, page 16).
 Plate No. 4. Frieze with garland. This piece of sculpture has several interesting points about it. The style of ornament is distinctly Roman, or rather Græco-Roman. Swags or garlands decorate the entablature of the temple of Vesta at Tivoli, which dates from about 70 B.C. In the present case the garland has a Buddhist significance. To this day garlands of cloth are carried in procession in Burma¹ to adorn Topes or sacred trees. They are frequently represented in the Bharhut and Sanchi sculptures, and are seen depending from the sacred Bodhi Tree and placed round Topes.

Two of the figures have wings—one playing a guitar, the other seems to be striking a gong or small drum or tambourine. The two supporting figures are playing the drum and cymbals.

¹ General Cunningham thus describes this sculpture:—"Figures carrying along undulating wreath attended by winged musicians. In Burma I have seen these cylinders of figured, mudra distended by hoops of bamboo from 60 to 100 feet long carried in procession just as represented in this sculpture, and afterwards hung up upon holy trees."

(SHEET No. 74.)

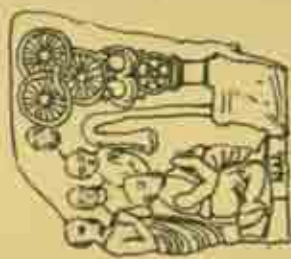
Selection from Plates 7, 12, 19, and 28.

53. The elephant scene, which forms the subject of plate 28, is from Mian Khan, and very much damaged. It represents an elephant infuriated, at Devadatta's instigation, with drink, to make him charge Buddha; but instead of doing any harm, the animal does obeisance.

Plates 7, 12, 19 and 28.
 Elephant scene. M. Symbol
 Wreath. N. U. Prince of standing
 figures. N. U. Seated King. N. U.
 Head of Prince. B.

In the left-hand corner we have a representation of walls with battlements, and a doorway the jambs of which are sloped in a manner similar to the Etruscan doorways of the 5th and 4th centuries B.C.

The three lower fragments are all from the Upper Monastery at Nuttu. On the right are monks adoring the Dharma-chakra, Tir-ratna, and Tir-chakra symbols. In the centre is part of a frieze of standing figures in easy and graceful attitudes. On the left is a seated figure on a throne under a canopy, probably a person of rank. A small figure standing on a pillar is fanning him with a leaf. In the upper right corner of the page is a highly ornamental head with a foliated halo. General Cunningham thinks that it represents Prince Siddhartha before he left his home to become a mendicant. The Prince wears an elaborate turban with plume, a necklet and a necklace with two deer-headed clasps similar to those on the figures in plates 10 and 30, page 32.





(SHEET No. 25.)

Selections from Plates 9, 29, 31, and 32.

54. The frieze of horses (plate 9) and the three supporting figures (plate 9) are from the Upper Monastery at Nattu. The remaining nine representations are from Mian Khan (see sheet No. 13).

The frieze of horses probably represents, in part, the procession of the four kings to present their bowls to Buddha.

On the right is a broken representation of a seated Buddha with a bowl in front of him, and two kings offering him two

Plates 6, 29, 31, and 32.
Frieze of horses. N. U.
Supporting figures. N. U.
Five heads. M. Frieze with Pil-
lars. M.
Frieze with Buddha. M.
Two lions and boys. M.

smaller ones. The horses have bridles and head stalls which were not in use by Indians, and were probably introduced after Alexander's time.

The three sculptures of supporting figures or "Caryatides" show how very various were the attitudes given to these features.

Of the nine sculptures from Mian Khan, the five heads show considerable power of expression. The man's head (probably Devadatta's) is particularly good, and the female head on the right might be that of a Grecian statue. The frieze below has a number of Indo-Persian columns.

The two pieces of stone with boys and lions were probably terminals or ornamental portions of a door.

The frieze in the lower right corner is thought by General Cunningham to be part of a Jataka or "Birth Story" of Buddha, but he has failed to recognise it.

(SHEET No. 26.)

Figures represented in Plates 10 and 30.

55. The figure on the right from the Upper Nattu Monastery is in good condition. General Cunningham tells me that the rich ornaments and the moustaches show this to be the figure of a king or some layman of rank. He also thinks that the figure on the left, from Mian Khair, represents Prince Siddhartha before he became a mendicant.

The head-dress and jewelry in both are most elaborate and ornamental. The deer-claws noted in plate, page 30,—probably a sign of royalty,—occur in both these figures, and resemble the fastenings of a skin round the shoulders of a statue at Sanchi. The amulets strung together over the right shoulder of the left figure are like those worn all over India at the present day. Lace or embroidery seems to have been known as shown in the drapery over the left leg of the standing figure.

56. With reference to the disposal of the sculptures, I am of opinion that all the important pieces should be retained for the Lahore Museum. These would include the whole of those represented in the outline drawings which accompany this report. They would also comprise many of the other 503 sculptures. I therefore propose to make a selection from these for Lahore, and to dispose of the remainder among the various Indian Provincial Museums.

57. There is no doubt that a knowledge of the Gandhara sculptures would be most interesting to the learned in Europe. General Cunningham procured a number of photographs, the negatives of which are in the Calcutta Museum. I have a set of photographs and negatives of the Sanghar bas-relief, and photographs could easily be procured of the best subjects in the Lahore and Calcutta Museums. General Cunningham proposes to get out a joint book to comprise all the best specimens of the "Buddhist sculptures of Gandhara," and I agree with him that it would be a very interesting volume.

58. In conclusion, I have a word to say about the sculptures that have been deposited in the Lahore Museum. Some of them are labelled, some are not. Most of them are arranged with no sort of system; visitors have insufficient means of ascertaining where they came from. There are also numerous duplicates which confuse the eye, and take up the already overcrowded space.

59. A selection of all the best pieces should, I submit, be made and arranged so as to be well seen, and placed in groups, so that it may be at once apparent what came from each site.

60. A large map is necessary to illustrate the Eusebian country.

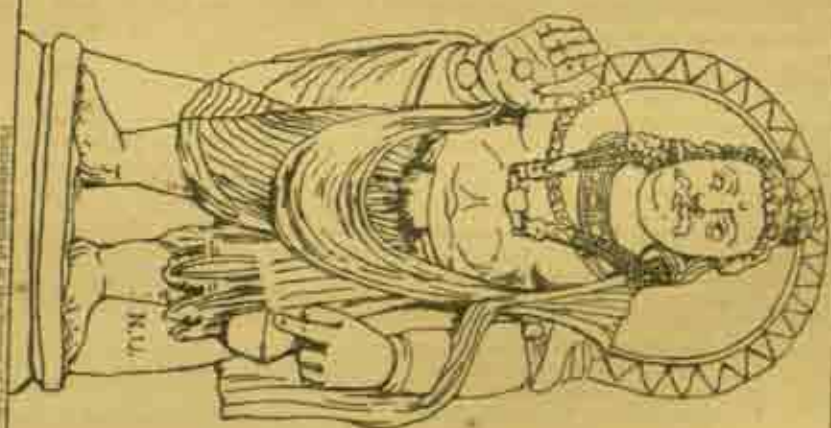
61. The more delicate carvings should be in suitable glass cases. At present a large number are placed in dark corners and cannot be properly inspected; but if the whole be reduced in dimensions to a collection of single representations of each class and subject, the numbers of zones would be greatly reduced, and the best use could be made of the available space. A very considerable portion of the collection could be displayed in the entrance hall of the Museum, where there is fair light and a large amount of wall surface, which is most suitable for bas-reliefs, originally designed for and applied to an upright position.

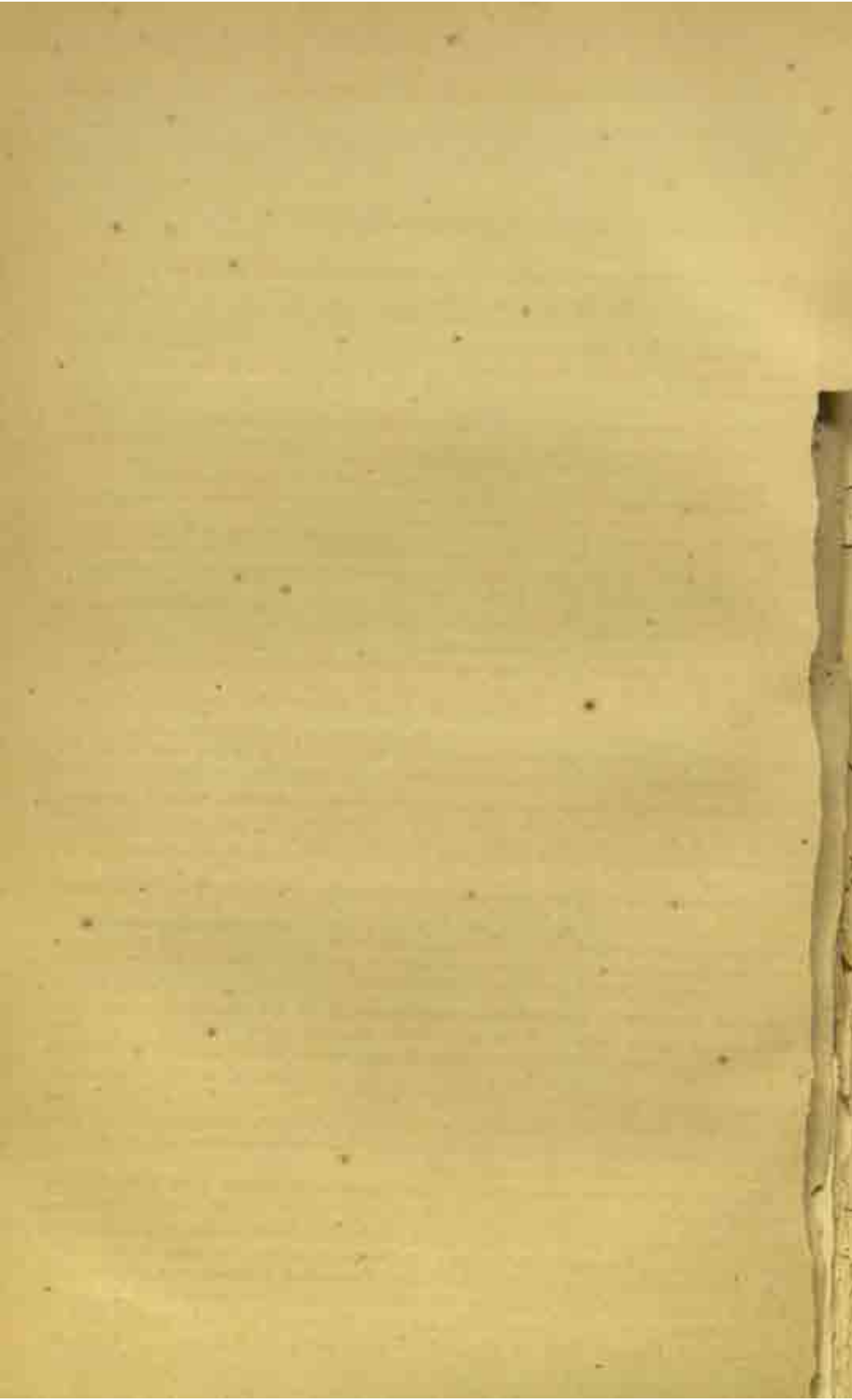
62. The duplicate specimens should, I submit, be sorted into collections for presentation to the following institutions:—

- The Imperial Museum, Calcutta.
- The Central Museum, Madras.
- The Museum at Bombay.
- The Museum at Jaipur.
- The Phayre Museum, Rangoon.

63. Casts of all the finest and most important subjects, whether at Lahore or in Calcutta, should be made for the British and India Museum, or for any other institutions that desire to possess a set.

These casts could also be exchanged for representations or reproductions of fine Oriental art works in the various European collections, and would in this way produce a more profitable return than if simply charged for at cost price.





Appendix K.

Reports and correspondence, &c., concerning Ancient Monuments in the North-Western Provinces and Oudh.

1. In May 1882 I addressed the following letter to the Government of the North-Western Provinces and Oudh :—

"I have the honour to . . . ask to see the specifications or plans for—

- I.—Cleaning and framing the Somnath Gates, now in the Agra Fort. (I think these gates should remain where they are.)
- II.—Restoring the ceilings of the Dewan-i-Khas and Khas Mahal in the fort.
- III.—Clearing and restoring the second pavilion of the Jahangir Mahal (now occupied by the Provost Sergeant) in the fort.
- IV.—Clearing out the Birbal house, Akbar's office, Miriam's house, at Fatehpur-Sikri.
- V.—Preservation of the painted interiors at Sikandra.
- VI.—Repairing the Faizpur-ki-Masjid near the Taj.
- VII.—Repairs to the Buddhist Tope at Sarnath.

"All these works are of importance, and, if necessary, I would recommend the Government of India to contribute grants-in-aid.

"Some of the interiors at the Fatehpur-Sikri Mosque, and the Mosque and its Jawah at the Taj have been repainted, but nothing has been attempted in the way of preserving existing paintings, such as those at Sikandra and at Itmad-ud-Dowlah's Tomb. Some of the frescoes are excellent, and I strongly recommend that Mr. Heath be authorised to make experiments in cleaning and preserving them."

2. I again addressed the Government in the following terms concerning the Sarnath Tope.

"Referring to letter No. 396-C.B. and R. of 1882, from the Secretary to the Government, North-Western Provinces and Oudh, Public Works Department, stating that the Sarnath Tope might be left to decay, I have the honour to solicit the consideration of His Honour the Lieutenant-Governor to the importance of keeping this interesting and ancient Buddhist monument in a state of repair.

"I have never advised or advocated any restoration of the tope, it being in my opinion merely necessary to secure the existing masonry at the base by rebuilding it securely and by using mortar or cement to prevent the percolation of rain or growth of destructive vegetation. Should the Government of the North-Western Provinces and Oudh be unable to furnish the necessary funds, I would recommend the Supreme Government to give them. For this purpose, however, it is necessary for me to see a specification and estimate."

3. The question of procedure as regards work in the North-Western Provinces and Oudh having been considered by the Government, orders were issued on the 23rd June 1882 giving me the position of a Superintending Engineer as far as concerns the North-Western Provinces and Oudh, and directing the Executive Engineer, Archaeological Division, to submit all his projects and proposals to me before being finally dealt with by the Government of the North-Western Provinces and Oudh.

This ruling does not contemplate any connection on my part with the subsequent execution of the work which is supervised by the Superintending Engineers of the 1st and 2nd circles, but the Government invites my inspection of works in progress, and directs the completion reports to be sent to me.

4. After personally conferring with the Executive Engineer, Archaeological Division, on the subject, I recommended and forwarded his estimate for repairing the vaulted roof of the temple of Govind Deo at Bindrabun amounting to Rs 9,377. This was

sanctioned, and I inspected the work in progress on the 1st March last. (See Inspection Note, page cxliv.)

5. The Military Works Department wishing to utilise the space occupied by the courtyard of an old palace in the Agra Fort, called the "Dansa-ki-koti," referred to me to know if it was desirable that any portions of the building should be preserved, and on my representation, expressed their readiness (on the 1st November 1882) to keep in tact the ornamental frontage as indicated by me on a plan submitted to the Inspector General.

6. I examined and recommended the following projects estimated for by
Projects. Mr. Heath:—

Entrance Gate, Taj Serai.	Repairs to the entrance gate of the Taj Serai at Agra	Rs. 1,485
Sikandra Entrance Gate.	Repairs to the Sikandra entrance gate at Agra	795
Pinnacles at Sikandra.	For replacing the gilt copper pinnacles on the kiosques of the Sikandra entrance gate at Agra	1,700

These were sanctioned by the Local Government on the 4th December 1882.

7. Mr. Heath's revised estimate amounting to Rs. 16,576 for inlaying and completing the repairs to the Saman Burj in the Agra Fort was recommended on the 6th November 1882.

A revised estimate for completing the repairs to the Khas Mahal in the Agra Fort had been prepared by Mr. Heath at my suggestion, and by providing invisible iron joists lined with marble instead of solid marble slabs for the ceiling, the revised estimate of Rs. 18,160 was less than the original estimate by Rs. 57,049. The above estimates received the sanction of the North-Western Provinces Government on the 4th of December 1882.

8. In November I had forwarded, recommended, an estimate amounting to Rs. 1,290 for repairing Raja Rattan Singh's building at Agra Fort. This received sanction on the 30th March.

9. In January an estimate of Rs. 1,305, prepared at my recommendation, for preserving and glazing in the Somnath Gates in the Agra Fort, was sent up to Government. This has not yet been sanctioned.

10. During February I was engaged with Mr. Heath in inspecting buildings at Agra, Muttra, Bindrabun, Aligarh, Budaon, and Jaunpur, and addressed the following letter, with inspection notes, to the Government, North-Western Provinces and Oudh:—

"I have the honour to forward 20 copies of my notes on the inspection of buildings at Agra Sikandra, Fatehpur-Sikri, Muttra, Bindrabun, Aligarh, Budaon and Jaunpur, and hope that the various recommendations may receive favourable consideration.

"With reference to your No. 1137 B. R., dated the 17th March last, informing me that the estimate for clearing and framing the Somnath Gates has not been sanctioned, I beg to point out that these gates have both historical and artistic interest, and should be preserved and protected from dirt and dust. There can be no doubt of the purely Muhammadan origin of their enrichments, and that they never in their present shape adorned the temple of Somnath. It may be that Mahmud of Ghazni used the wooden frame taken from Somnath and recarved it in accordance with the artistic traditions of his age, but of this there is no proof. The gates are, however, valuable as works of Muhammadan art of an early period and cost us no doubt a large sum to remove from Ghazni. A similar case is met with in the Chittore Gates which

Akbar brought from Chittore and placed in the Machi Bawa, Agra Fort. Any evidence of Hindu art that might have existed in them has certainly been obliterated, and the wooden surface is now covered with stamped or repoussé plates of brass outlined in Muhammadan ornament. The estimate drawn up at my suggestion for the Ghazni gates is not very costly, and I hope therefore that Sir Alfred Lyall will sanction it.

"The Lieutenant-Governor has on two occasions assured me that measures should be taken to preserve the Buddhist Tope at Samnath near Benares, but I have as yet received no official intimation of anything having been either sanctioned or commenced."

NOTE ON BUILDINGS IN THE FORT AT AGRA.

During my visit to-day to the Palace buildings in the Agra Fort, I was accompanied by Lieutenant Shone, R.E., Executive Engineer, Agra Division, Military Works, who is carrying out many alterations demanded by the military requirements of the place. Some of these must necessarily interfere with the appearance of the Fort walls and interior apartments. The reconstruction and improvement of batteries, the improvement of communications and the treatment of Palace buildings, in charge of the Military Works Branch, may, however, be so considered as to do the least damage to the architectural appearance of the various structures.

(2.) In introducing new embrasures, it is, I submit, possible to preserve the outline of the old outline to be retained as old wall to a very great extent. The outline given to the old parapet may still be kept apparent on the surface of new masonry work, whilst ramps and banquettes may be so constructed as to cover up decorated surfaces as little as possible.

(3.) The continued occupation of the second pavilion on the roof of the Jahangiri Mahal by the Provost Sergeant is most damaging to the building. When it is cleared, and I understand that separate and suitable quarters can be provided elsewhere,—the whole symmetry of the river facade can be restored. The interior of the Palace Court could also be much improved by renewing fallen chujjas and by restoring those portions of the buildings which have fallen in.

(4.) Large sums of money have been expended on the renovation of the fort buildings, but I regret to learn that damage continues to the mosaic work, from which stones are picked out wantonly. To obviate this, a series of gateways or doors should be placed so as to enclose the buildings of interest. There must be a chowkidar to keep the keys, and to admit authorized visitors. By some such means alone will it be possible to render wanton mischief impossible.

(5.) The exterior facade of the Ummir Singh Gate is damaged in places by weather. The tile work in the band above the archway is also decaying. The marble and stone work should, I think, be cleaned up and repaired, and the broken edges of the tile work, edged with cement, to prevent further peeling away.

NOTE ON AKBAR'S TOMB AT SIKANDRA.

I visited Sikandra on the 17th February with Mr. Heath in order to see the gateway to the west of the enclosure, which is under repair, and to meet Ismail Khan, painter, of Delhi, about the restoration of the finely-coloured walls and dome of the chamber in front of the passage leading down to the actual tomb of the Emperor Akbar.

2. The west gateway has gradually assumed its original appearance, and is a fine example of the architecture of Jahangir's day, being well proportioned, and the decoration applied with judgment. The painted dome of the great arch has been retouched and brightened up by Mr. Supervisor Laarmouth, the effect being excellent. The preservation of the quaint designs which cover the surfaces of the walls and domed ceiling is not only desirable, for the sake of the structure and its appearance, but also in the interests of Indian art generally.

3. The walls of the porch of the tomb building are covered with splendid patterns of gilded and painted work. Smoke and damp have in parts completely obliterated them, but enough remains to permit of restoration. I had hoped that a process of cleaning off the dirt and stains might have successfully revealed the paintings beneath, but this seems impossible, as the plaster is greatly damaged, and ready to peel away. Ismail Khan is, therefore, to completely restore a small section of the wall surface as an experiment; and if successful the whole of the chamber should be treated in a similar way.

NOTE ON BUILDINGS AT FATEHPUR-SIKRI, NEAR AGRA.

The Agra road approaches the confines of Fatehpur-Sikri from the east and enters them at a gateway, which has received a few necessary repairs. Buildings along the upper approach. Passing along the upper road, ruined heaps of stone lie scattered north and south. This used to be a favourite quarry for the grindstone trade, but the work has been stopped. Before reaching the Nobatkhana, a small rectangular pavilion is visible to the right or north. It is of red sandstone, has a verandah, and is worth repair. Mr. Heath is preparing the necessary estimate for the work. (Mr. Heath's estimate is for Rs. 8,811, which seems to me a very large sum for doing what is needful to prolong the existence of the building.)

(3.) The Nobatkhana, which was a ruined heap of debris at my last visit in July 1881, has been repaired and cleaned up, and now presents a good appearance. The simple but effective outlines of the four gateway buildings have been restored and brought into view.

(3.) The old mint buildings to the north of the road beyond the Nobatkhana are greatly ruined, and should be cleared of debris, and any dangerous walls or domes propped and strengthened.

(4.) The Diwan-i-am is still much ruined, but its central pavilion has been renovated, and 100 feet of the flanking colonnade, north and south, have been restored. In the pavilion itself are a number of paintings, which have become somewhat indistinct. They should be renewed where necessary, so as to preserve the patterns and emphasize the faded outlines. This remark applies to all painted works at Fatehpur-Sikri in which the painted outlines are still sufficiently distinct.

(5.) Entering the precincts of the private apartment from the Diwan-i-am, the Diwan-i-Khas is seen in a repaired state, but to be complete should have the whole of the trellised openings made good. The Ankh-mahall and the Jogi's baitak close by are also repaired, and complete, save the painted work in the latter. The Pauch Mahal, Akbar's Khwabghar, and the Turkish queen's house have yet to be taken in hand, but Akbar's dargarkhana has been repaired, although still the public bungalow and therefore fitted with doors and windows of incongruous design. Miriam's

A suitable bungalow for visitors. house, which is undergoing repair, is also fitted up as a place for travellers, and the Birbal house is furnished for district officials. The use of these three mentioned buildings for dwellings prevents any one realising what they were like in the days of Akbar. The windows and doors render the buildings dark, and spoil interior effects and most decidedly mar the exterior architecture. Khitmatgare's cocks and hens and fitter go to make up the incongruous and not even picturesque surroundings.

(6.) The Palace of Akbar's Rajput Queen, the Jodh Bai, is wonderfully improved by repairs, which are still in progress. Some of the old masonry piers, which were built years ago to prop broken beams, might, however, be now removed and the beams strengthened and the upper terraces supported by iron jolies let into the old stone work. The brilliant blue tillo-roofs are much discoloured by weather; the broken edges should be secured, and the broken parts made good by cement. There is not much coloured work in the palace, but what there is should be emphasized where faded. The repainting of the parapet is particularly required to complete the design, and break the monotony of the present long horizontal lines of the single-storied colonnades. The effect of the interior court is somewhat marred by trees, which I think should be removed. Their roots also damage the masonry of the terrace.

The exterior façade of the palace towards the east, *i.e.*, near Miriam's house and the dargarkhana or dāk bungalow, has some flanking buildings, which are in themselves of slight architectural importance, and are certainly no part of the palace design. They probably were built for eunuchs, and their removal would reveal the façade and be a considerable improvement.

(7.) The cumbersome masonry props used in the stables, south of the Birbal Palace, might with advantage be removed, and the roofs otherwise strengthened from above.

(8.) The Birbal house requires taking in hand, and repairing, as soon as it is freed of its dāk bungalow fittings and furniture.

[Mr. Heath has estimated for repairing the foundations of the building at a cost of Rs. 4,500. A sum of Rs. 2,000 has meanwhile been allotted for prosecuting the work.]

The various structures, north and north-west of the Birbal Palace, are repaired, in course of repair, or under consideration.

- (9.) The Hathi Pol Gate is done, but the colonnade to the east which formed a part of

Hathi Pol Gate.

the water-lifting arrangements, connected with the adjacent well, wants attention; a portion of the colonnade is very ruined, and must either be removed or else taken down, and securely rebuilt.

[I have since recommended an estimate for repairing this amounting to Rs. 2,400.]

- (10.) The Kashmiri Sarai, which has become ruined and surrounded with debris, is being put in order, and the Hiran Minar near it is also being renovated.

Kashmiri Sarai.

- (11.) The actual structures of the great mosque and its colonnade have been repaired.

The Great Mosque.

The painted decoration of the archway, which occupies the centre of the mosque itself, has been most successfully renewed by Mr. Supervisor Learmonth under Mr. Heath, and is in my opinion a creditable piece of work. A good deal more of the painted work in the mosque may, with advantage, be picked out and retraced and so brought to light.

I have asked Mr. Heath to make an experimental renewal of the mosaic of tile in the sandstone borders which adorn some of the exterior and interior archways of the buildings.

- (12.) There are several buildings of interest near the Great Mosque, and further west at

Outlying buildings.

the extremity of the Fatehpur-Sikri provinces, which merit preservation. They are little known at present. The Haraotika-Raja Pavillion at the extreme north-west corner of the walled enclosure is a conspicuously good example of an octagonal court and central pavilion. And nearer the mosque is the house of Nawab Islam Khan, a much-ruined court and buildings, but singularly well enriched with good columns in red sandstone.

- (13.) I hope that all buildings will be photographed before, as well as after, they are reno-

Photographic records of repairs.

- (14.) The systematic out-rooting of weeds from roofs, domes, and terraces should, I submit,

Systematic out-rooting of vegetation.

be arranged for between Mr. Heath and the Collector. The best way will be to make a complete clearance after each rains.

NOTE ON BUILDINGS AT MUTTRA AND BINDRABUN.

- (1.) I visited the Jama Masjid in the city of Muttra on the 1st March with Mr. Heath,

Jama Masjid at Muttra.

Executive Engineer, Archaeological Division. It was built in the reign of Aurangzib, A.D. 1660-61, and is raised on a

terrace 14 feet above the street: and at the corners are four minarets over 90 feet high. The whole building was once richly adorned with encaustic tiles of the mosaic class, similar to those in the mosque of Wazir Khan at Lahore. Coloured detail drawings of the panels of tile that remain would be valuable and should be obtained. The existing tile-work should be preserved by edging with cement. The time may come when it can be restored, but the art of producing this particular class of tile-work is dormant in India.

- (2.) Leaving Muttra we went on to Bindrabun to the Temple of Govind Dev, which I had

Temple of Govind Dev at Bindrabun.

not seen since 1868. Since that time it has been restored firstly by the Magistrate of Muttra, and latterly by Mr. Heath. The

towers of the building were overthrown by Aurangzib and have not been renewed, but the exterior walls have been renovated up to where the towers commenced, the effect being a trim and unbroken sky-line. I am not sure that the restoration of the uppermost parapet is correct, and think that it would have been better to leave the superstructure, as it appeared when I first saw it, with all the evidences of Aurangzib's destructive hand.

Now the building looks as if stopped for want of funds, and, as Mr. Fergusson expressed it to me, "with all the poetry washed out of it." Putting this impression aside, a large amount of good work has been done, and the architectural treatment of the lower part of the building has been faithfully reproduced. Repairs are in progress to the stone lining of the wagon-vaulted roof of the porch, the carved enrichments of which are very delicate and beautiful. As far as I know, there is only one drawing showing the Temple before Aurangzib commenced to overturn it, which may be seen on the walls of a small apartment in the Palace at Amber near Jaipur, but the native artist's work is so sketchy and inaccurate that very little evidence is afforded of the outlines of the *sikhar* or towers that crowned the Temple.

There are two *sikhar*s flanking the sanctuary which possess curious hexagonal chambers and are raised several feet above the main floor of the Temple.

The Gossains or Pujaris of the place wish to have an iron gateway placed at the present entrance, in order to secure a proper custody of the Temple and prevent damage. I think this should be allowed, provided the public have free admittance, and the gate is not a means of extorting largess. The State is to a certain extent interested in the Temple, upon which large

sums have been spent, and the restorations and repairs are in the interests of archæology and architecture.

NOTE ON THE CONDITION OF ARCHITECTURAL MONUMENTS AT ALIGARH, BUDAON, AND JAUNPUR, IN THE NORTH-WESTERN PROVINCES.

- (1.) The Jams Masjid at Aligarh is a building of some importance and was built by Sabit Khan in 1728 A.D. Architecturally it is an adaptation of Aurangzeb's style, having bulbous domes with lofty finials and

Jams Masjid at Aligarh.

arches with flat coatings. (2.) The Muhammadans of the city are repairing the edifice, but the whole character of the design is being altered by the native "Ustad" or architect. The surface of the great range of arches is being plastered over, panelled out and decorated in a style which completely obliterates the outline and form of the original façade.

(3.) The domes surmounting the sanctuary of the mosque are outlined with tiles in bands of dark blue, yellow and green; the parapet has a foliated crenellation also outlined with tile bands, but how far the new repairs will preserve or obliterate these features, I do not know. The parapet was being repaired in plaster without any tile decoration when Mr. Heath and I inspected the building on the 2nd February last, and the domes will not improbably share a similar fate unless better counsels prevail and the old lines of the structure are more faithfully reproduced.

(4.) Although the mosque does not stand in the first rank as a national work, I think that Government might with great propriety take up the matter and secure a more fitting restoration of the building.

(5.) The interior has been re-done in chunam and looks cool and fresh, but the painted circles of the ceilings of the domes are renewed in the harsh and crude colours which find their way from England into Indian bazars. The mosque is substantially built of large blocks of kunkar, and appears to be structurally secure.

- (6.) Mr. Heath and I visited the mosque at Budaon on the 3rd of February last. This most interesting building was erected in A.D. 1225 by Shams-ud-din Altamsh out of the plunder of Hindu temples, and bears

Jams Masjid at Budaon.

a similarity to the mosque at the Kutub and at Ajmir. Although far plainer as far as decoration goes, it has a quantity of carved brick-work which appears to have been partially if not wholly enamelled.

(7.) The brick ornamentation is specially interesting, as it is capable of adaptation to modern Indian buildings in localities where brick is the only available material, and its study will well repay the architects of our railway stations and civil buildings. The sanctuary of the mosque is kept in some kind of repair, but as usual there is a great deal of unnecessary plaster and whitewash, which obscures the old masonry. The quadrangle in front of this is enclosed by arcades which are very much ruined and overgrown. Some of the arches might be repaired, and it is certainly necessary to provide for the security of the handsome gateway to the east. All whitewash should be removed from carved tiles or brick as well as from walls, and details should be obtained of all the ornamental work.

(8.) The Muhammadans of Budaon might contribute to the cost of the work, but I think this is a building of imperial interest, and its repair should, if necessary, be secured by Government.

- (9.) The Idgah of Budaon is a structure of some interest, having been built in A.D. 1209 by Shams-ud-din Altamsh, and has a quantity of ornamental brick-work which is worth illustration, but the plaster covering

Idgah of Budaon.

should be removed in permit of drawings being made.

(10.) The building known as the tomb of Chinni Khan is to the south of the town and highly decorated with brick-work. General Cunningham thinks it probably not older than the time of the Sikander Lodis and says: "The dome is unfortunately very low, otherwise this tomb would be a very fine and striking specimen of a Muhammadan brick tomb."

Tomb of Chinni Khan at Budaon.

(11.) Details of this building should be obtained as well as of the tomb to the west of the Magistrate's Court.

- (12.) On the 5th March I visited the Jams Masjid at Jaunpur, the repairs to which are being carried on by the Muhammadan community of the town.

Jams Masjid at Jaunpur.

During my visit, which was hurried, I saw enough to convince me that the work was not being well done. The south gate of the quadrangle has had its upper part renewed, the substructure having been left insecure. The halls flanking the sanctuary of the mosque have after repairs been whitewashed and the pointing of the masonry is in

other parts unnecessarily heavy and unsightly. I think that this building should be made over to the Archaeological Division of the North-Western Provinces.

11. On the 17th April, I recommended Mr. Heath's estimate for repairing

Nagina Masjid, Agra Fort.

the courtyard of the Nagina Masjid amounting to Rs. 3,708. On the same day I recommended a re-

Dewan-i-Khas, Agra Fort.

vised estimate for completing the repairs to the Dewan-i-Khas in the Agra Fort. Mr. Heath's

original estimate was for Rs. 85,424, and provided a marble roof put up in the old Mogul style of long and massive marble slabs. On my suggestion and as in the case of the Khas Mahal, he provided for roofing by iron joists, with thin marble slabs resting on the lower flanges, and thus reduced the estimate to Rs. 27,761, being a saving of Rs. 57,663. Both of the above estimates have since been sanctioned.

12. Since August 1881, I have urged the complete repair of the Jahangir

Jahangir Palace: roof-pavil-
ions, Agra Fort.

Palace in the Agra Fort. One of the roof-pavilions is occupied by the Provost Sergeant, and I am glad to

say that after some correspondence with the Government of the North-Western Provinces and Oudh, and with the Inspector-General of Military Works, it has been decided to build suitable quarters for the Sergeant, and so free the Pavilion, which is a very handsomely carved red sandstone building.

13. The Sarnath Töpe near Benares, properly the "Dhamek Stupa," was

Sarnath Töpe.

explored by General Cunningham in 1835, and the Government of the North-Western Provinces and

Oudh has sanctioned an estimate amounting to Rs. 7,784, in reference to which I made the following suggestions:—

"I have the honour to return the estimate for the preservation of the Buddhist Töpe at Sarnath.

"General Cunningham, when Assistant Engineer at Benares in 1835, made some rough drawings of his excavations. These he has lent me, and the tracing shows where the structure was examined. A well was sunk in the centre from top to bottom penetrating below the ground-line and foundations. A gallery was driven under the foundations from W. S. W. to E. N. E. A gallery was driven through the Töpe above the top of the stone basement from N. to S. A circular gallery was made just above the same basement.

"The core of the stone masonry is very solid, being of large blocks of dry rubble, bonded with iron cramps and vertical joggles.

"Mr. Heath's estimate appears to have been arrived at by rather rough calculations, and no object would be gained by introducing any new dressed stone masonry. It is simply necessary to get the old work, where bulged or displaced, back into its former place, and to supply breaches with rough masonry which may be of small stones about 18 inches long and 6 inches square, provided they are laid in mortar.

"I would respectfully suggest that it would be better to do the work by daily labour, for some part at least of the repairs, in order that a rate may be arrived at for completing the whole. In such a way and with careful superintendence I think the work would be done well and at a moderate cost.

"The galleries made in 1835 ought, I submit, to be filled in, and old bricks found on the spot, particularly in the adjacent dismantled tower, may serve the purpose."

14. Colonel Innes, V.C., R.E., Inspector-General of Military Works, has

Akbar's Palace, Allahabad.

decided, after some correspondence, to remove the whitewash from the highly carved sandstone pillars

and walls of Akbar's Palace at Allahabad, now in use as an arsenal store.

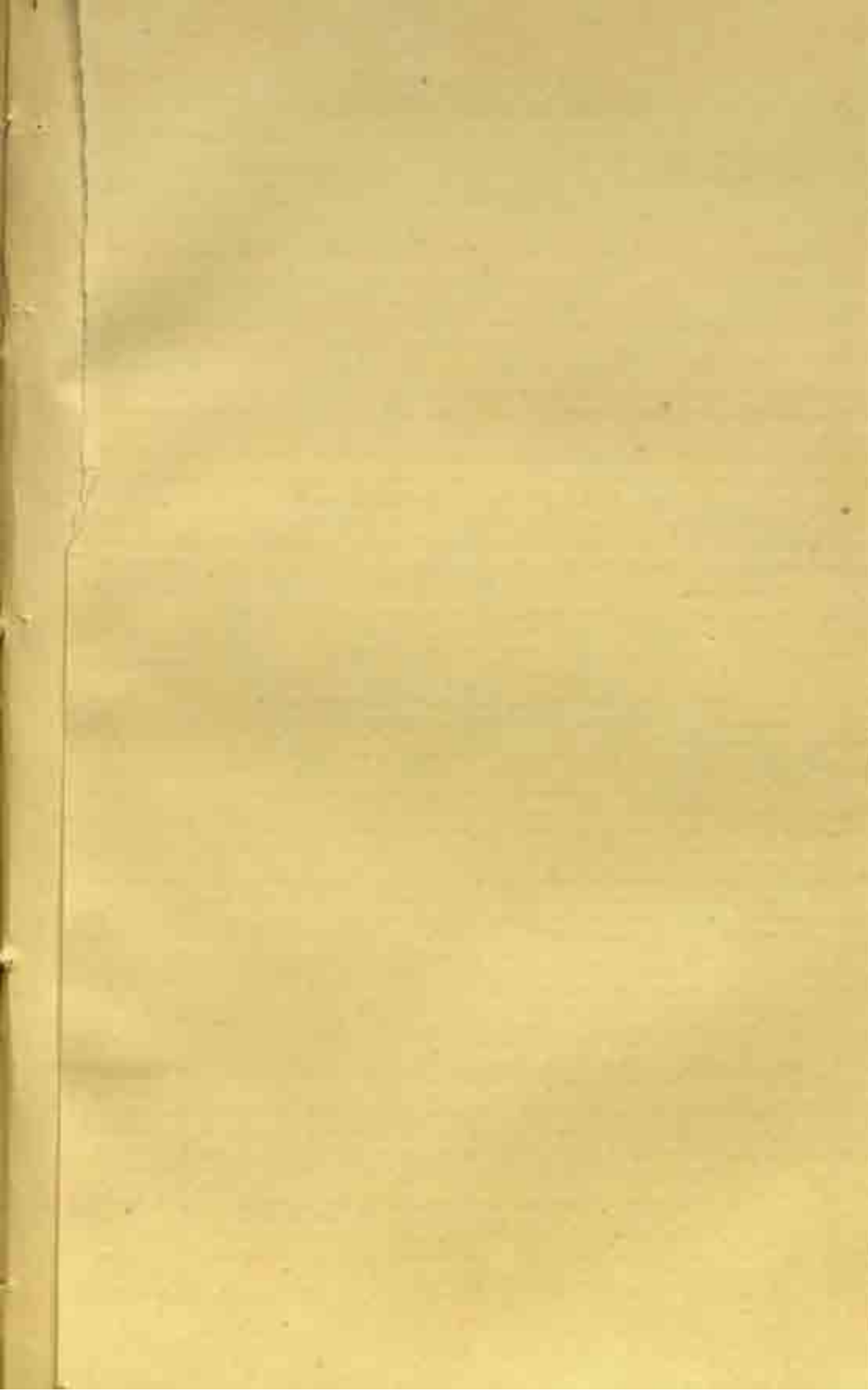
Appendix L.

Reports and correspondence, &c., concerning Ancient Monuments in the Central Provinces.

1. The only place in the Central Provinces that I have as yet been able to visit is the celebrated island, between two branches of the River Narbadda, called Mandhatta. It is easily

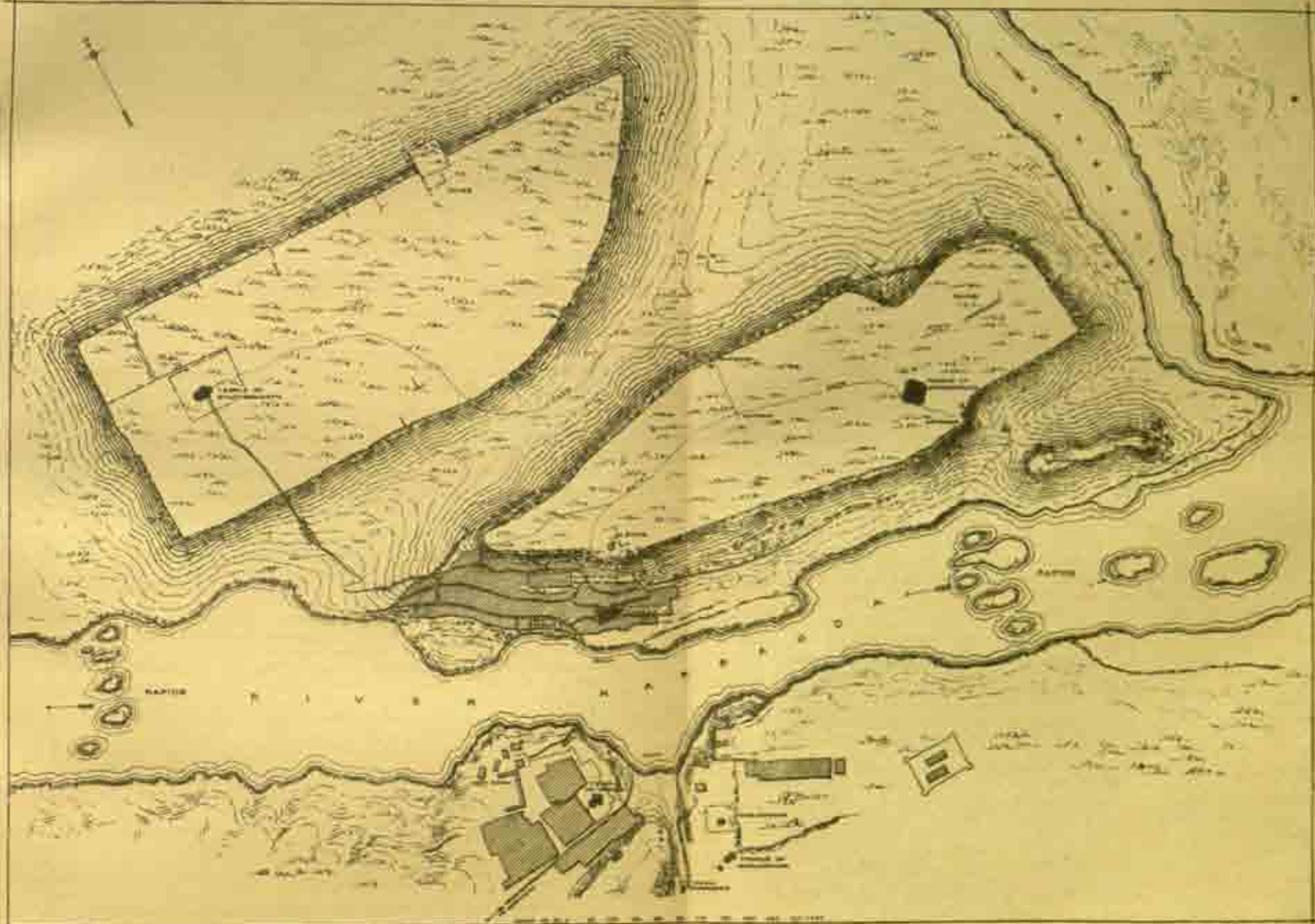
accessible from Mortakka, a station on the banks of the Narbadda on the Rajputana-Malwa Railway between Khandwa and Mhow. There is a fair road-track from the Mortakka station (where exists an inspection bungalow), the distance being 7 miles. The return journey can be performed by boat down the river. Mandhatta was at one time prophesied to supersede Allahabad in sanctity. On the island, in the shrine of Omkar, and on the south bank in a temple, are two of the twelve great Lingas, which are said to have been in India when Mahmud of Ghazni in A.D. 1024 carried off to Ghazni the gates from Somnath (another of the twelve Lingam shrines). The following is quoted from Grant's Gazetteer of the Central Provinces:—

"The old temples about Mandhatta have all suffered greatly from the bigotry of the Muhammadans who ruled the country from about A.D. 1400. Every old dome is overthrown, and not a single figure of a god or animal is to be found unutilized. The fanatic Ala-ud-din passed through this country in A.D. 1295 on his return from his Deccan raid, and as he took Aisargarh, which is not far off, it is improbable that he would have passed over so tempting an idol preserve as Mandhatta. Doubtless the work commenced by him was continued by the Ghori princes of Malwa, and completed by that archiconcrist Aurangzeb. Yet much remains among the ruins which must be highly interesting to the archaeologist. Both the hills are covered with remnants of habitations built in stone without cement. The walls of the different forts, two of which enclose the two sections of the island itself, and two more the rocky eminences on the southern banks, display some excellent specimens of the old style of Hindu architecture. They are formed of very large blocks of stone without cement. The stone is partly the basalt of the hill itself, and partly a coarse yellow sandstone, which must have been brought from a considerable distance. The gateways are formed with horizontal arches, and ornamented with much fine carving, statues of gods, &c. The best are those on the eastern end of the island, or Mandhatta proper, which also appears to be the only part that has ever received any repairs. It is easy to distinguish these from the old works, some being even as recent as the Muhammadan period, as at the Bhimarjuni gate (opposite the Birkhala rocks) where there is a distinct pointed archway laid in mortar. The oldest Saivite temple in the place is probably that on the Birkhala rocks, at the extreme eastern point of the island. It consists of a sort of closed courtyard with a front verandah, through which apparently was a passage to the shrine, which has now completely disappeared. It is totally different in plan from any of the other temples, which consist of the ordinary shrine and porch. The stones are of great size, the verandah and colonnades of the courtyard being supported on massive pillars very plainly carved in rectilinear figures. On the Mandhatta hill are the remains of what must have been, if it ever approached completion, a remarkably fine Saivite temple now called Siddheswar Mahadeva. The dome which covered the shrine is, however, completely gone, and has been recently replaced by a mean flat roof, not so high as the remaining pillars of the porches. In its fall it has also overthrown and covered many of the pillars of the porches, and much of the fine work of the plinth. It appears to have been a square shrine of about 25 feet outside measurement, with projections added at the four sides, each about 5 feet in depth. In each of these was a doorway, and in front of each doorway a porch (Sabha Mandap) resting on fourteen pillars. These pillars are 14 feet high to the architrave, each porch being thus a perfect cube. They are elaborately carved in squares, polygons, and circles, and most of them have a curious frieze or fillet of Satyr-like figures about half way up. They are about 3 feet square at the foot, and do not taper very much. They are all crowned with bracket capitals, on which rest the architraves, each bracket being carved into a grotesque squat human figure. The roofs of these porches appear to have been of flat slabs. It is impossible now to say what the adytum or shrine was like; but if it corresponded with the porches, it



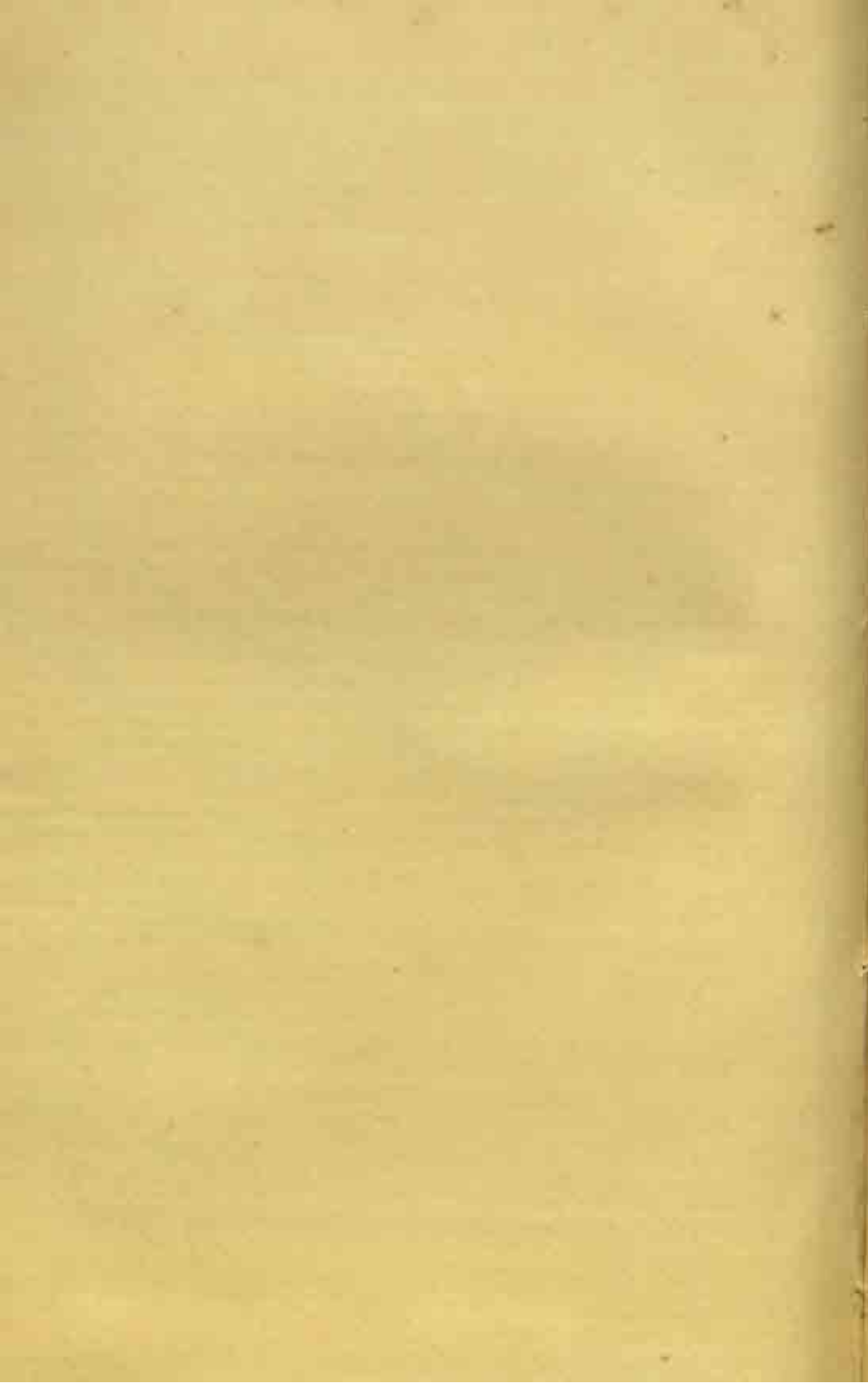
GENERAL PLAN
 SHEWING THE POSITION OF THE PRINCIPAL TEMPLES AT MANDHATTA
 ON THE RIVER NARBADDA, CENTRAL PROVINCES.

Preservation of Mahomedan Monuments in India.



Office of the Chief of Survey, Bangalore, India. Surveyed and Drawn, by H. B. CHITREDDY, June 1889.

Photographed at the Survey of India Office, Calcutta.



must have been a most imposing structure. The most remarkable feature of the building, however, is the plinth or platform on which it is built: this projects 10 or 12 feet beyond the porches, in front of each of which it is broken into a flight of 10 steps. It is raised about 10 feet off the ground, and appears to have been faced all round with a frieze of elephants, carved in almost complete relief on stone slabs. The elephants are between 4 and 5 feet in height, and are executed with singular correctness and excellence of attitude. The material is yellow sandstone, and they are consequently now a good deal weather-worn. In some cases there are two on a single slab in an attitude of combat, but more generally a single one, resting one foot on a small prostrate human figure. This frieze does not appear to have been completed, as close by, within an enclosure of which two sides are still standing, are a number of detached slabs with elephants carved on them, exactly like those on the plinth. All these, and most in the temple also, have been sadly mutilated,—the trunks, ears, and figure of the rider being generally broken off. The Raja of Mandhata has also removed a number to build into his new palace, after getting a mason to chisel them down to a manageable size."

I have had a survey made of the eastern portion of the island, also a plan, *Survey of island and Siddheswar Temple.* section, and details of the Siddheswar Temple described above. The plans, &c., are being zincographed, and when printed will be submitted to the Chief Commissioner of the Central Provinces, with notes and recommendations for preserving what is left of this remarkable structure.

2. The Mandhata island is covered with ruins and several fine Hindu gateways, all of which are worthy of being preserved, *Other buildings.* so far as the simplest and least costly remedies will permit: but the Siddheswar Temple is so remarkable that it merits special attention.

3. As my draftsmen were at work on the island, I thought it as well to take the opportunity of securing plans, sections, &c., of the Temple of Omkar, which stands in the town of Mandhata itself, and which is a handsome example of early Hindu art; and of the Gauri Somnath Temple, which is on the hill to the west of the island. Simple plans were also made of the temples to Vishnu and Mamleshwar on the south bank of the river. *Plans, &c., of Omkar Temple, Gauri Somnath, Vishnu, and Mamleshwar.*

4. The Deputy Commissioner of Jubbulpore sent me on the 16th June last an estimate amounting to Rs. 71 for some repairs to the Madan Mahal at Garha near Jubbulpore. The palace is said to date from A.D. 1100. I have stated in reply that I hope to visit Garha this tour season.

Appendix M.

Provinces and Native Territories not yet visited.

- | | |
|---|-----------------------------------|
| 1. Oudh. | 5. Maisur. (See list, page xl.) |
| 2. British Burma. (See list, page xli.) | 6. Travancore. |
| 3. Assam. (See list, page xliii.) | 7. Kach and Kattywar. |
| 4. Berar. (See list, page xl.) | 8. Nipal. (See list, page xliii.) |

Appendix N.

Reports and correspondence, &c., concerning Ancient Monuments in Haiderabad, Deccan.

1. Since the report of last year was written (see page ccxiii of the Annual Report for 1881-82), I have been unable to visit any fresh places in Haiderabad, but the vast tracts of country under the dominion of the Nizam are known to contain many monuments of great interest and beauty well worth the attention of His Highness.

2. The following correspondence with the Resident at Haiderabad shows what is in progress and what is contemplated or recommended as far as Kalburgah is concerned,—

Work at Kalburgah.

“With reference to your letter No. 413, dated 12th September 1882, offering certain suggestions relative to the repair and preservation of the ancient buildings at Gulburgah, I am directed to forward for your information a translation in English of a report by the late Sadr Talukdar on the above subject received through His Highness the Nizam's Government, from which it will be seen that the vegetation in and around the domes has been removed, that the column in the Great Mosque which had fallen has been rebuilt, and that steps are being taken to repair the Mosque and make use of it as a place of worship.

“You will observe that amongst other proposals made in the enclosed report, the whitewashing and painting of the domes has once more been recommended. As, however, this is a barbarous proposal and has been strongly deprecated by you, the Resident intends again addressing His Highness the Nizam's Government in the matter, but before doing so Mr. Cordery would be glad to receive any further remarks you may have to offer.”

Purport of the Sadr Talukdar's Report.

“States, with reference to Captain Cole's report, that in both the large as well as the small rozas (domes) of Khaja Bundeh Nawaz, the paintings and ornamental sculpture on the walls, which have been obliterated by the whitewash used annually, should be revived, the walls should then be whitewashed and the decorations painted either black or any other colour. The Sajjids (relatives of the saint who are in charge of the shrine) should be written to officially and directed to interest themselves in the work and defray its cost. The work should be done by the municipality.”

“Seven of the domes which belong to the Bahmani kings were whitewashed outside and partly inside when His Highness the Nizam visited Gulburgah some time after Captain Cole's inspection of them, but the work was not done completely owing to the want of time. A few of these are certainly very elegant in appearance outside and inside, and they might be repaired and improved in the same manner as the large and small rozas of Bundeh Nawaz, so that the

ornamental sculpture in them may appear to advantage. The cost of this work should be borne by the municipality, and orders should be issued in the matter through the zillah kacherrie. All the domes, including the above seven, have been whitewashed, and the vegetation around them cleared away, but they should be whitewashed completely inside also; the cost might easily be defrayed by the municipality.

"The Great Mosque which is in the Fort should also be repaired in the above manner. There is not another edifice in the whole of India like it in structure; and if it be allowed to fall into ruins, it will be a matter for general regret, and reflect discredit on the Nizam's Government.

"The road referred to by Captain Cole which leads into the Fort is now being used, and the place is increasing in its population. One of the columns in the mosque which had fallen was repaired last year, and there is no fear now of the building tumbling down.

"A sum of Rs. 45,000 was entered in the present year's budget, when I was the Sadr Talukdar of the district, but I am not aware if this grant has been sanctioned or not.

"I take this opportunity of mentioning that when I was the Sadr Talukdar I suggested that the raised portion of the mosque be set apart for worshippers, and the remaining portion be used as a school, but after consideration this suggestion was not adopted, as a new school-room is under construction, and there is now no department which requires to be accommodated in the *Pier*. The use of this building for any other purpose will be greatly objected to by all the Muhammadans of the place. It is therefore very desirable that the mosque be completely repaired both inside and outside and used for the purpose for which it was built. If repaired properly, the screen suggested by Captain Cole (a plan of which has been received) would not be required.

"An estimate of the cost of repairing all the ancient buildings at Kalburgah should be called for from the district, and sanctioned by the Government. The work should be commenced with, in anticipation of sanction of the budget grant of Rs. 45,000, as the rainy season is fast approaching."

Letter No. 110 of 24th June 1883 to the Resident, Haiderabad, from the Curator of Ancient Monuments.

"I have the honour to acknowledge the receipt of your letter No. 818 of 1883-84, dated the 30th May 1883, enclosing an English translation of a report on ancient buildings at Kalburgah.

"In reply I can only reiterate what I have said in my report of the 25th June 1881, and letter No. 413, dated 12th September 1882. All whitewash should be removed from the buildings, and stone masonry should be left clean.

"It is, I think, most satisfactory to learn that the proposal to utilise the Great Mosque for any secular purposes is likely to be abandoned; also that repairs to this and other ancient structures at Kalburgah are contemplated.

"I would suggest that before any definite action is taken, the specifications to be followed for work in the several buildings be sent to me for perusal and observation."

To this the Resident replied on the 12th July 1883 that orders have been issued by the Nizam's Government to furnish the specifications of work at Kalburgah for transmission to me.

Appendix O.

List of some ancient and modern Forts and Citadels in India.

(Revised.)

Punjab.

1. ATTOCK—Muhammadan. Akbar, 1583.
2. BALLABGARH—Delhi—Muhammadan.
3. CHARSUDDAH—Peshawar—Old Pathan Fort called Balla Hissar, built on the site of Pushkalavati, the ancient capital of Gandhara.
4. DELHI (OLD FORT)—Lalkot, 1052—Hindu.
5. Kila Rai Pithora, 1180 A.D.—Hindu.
6. Siri or Kila-Alai, 1304—Muhammadan.
7. Tughlakabad, 1321—Muhammadan.
8. Adilabad—Muhammadan, 1325.
9. DELHI (MODERN)—Muhammadan.
10. DEPALPUR—Montgomery—Early Muhammadan; in ruins.
11. EDWARDESABAD—Bannu—Modern, 1848.
12. ISLARGARH—Bahawalpur State—Hindu.
13. JAHAZGARH—Rohtak—Built by George Thomas.
14. JATAK—Sirmur State—Hindu.
15. JAMRUD—Peshawar—Muhammadan. Occupied by the British.
16. KOT KANGRA—Early Hindu.
17. KUMLAGARH—Mandi State—Hindu. 1,500 feet above the Beas River.
18. MALAUN—Hindu State—Gurkha. 2,000 feet above the Rivers Gamtara and Gambhar.
19. MALLOT—Salt Range—Old Hindu. Contains a temple in the Kashmir style of architecture. Circuit of fort 8,000 feet.
20. MASTGARH—Bashahr State—Gurkha.
21. MICHNI—Peshawar—British.
22. MOHUR—Bashahr State—Gurkha. Contains a famous Hindu Temple.
23. MULTAN—Muhammadan.
24. NAWAGARH—Bashahr State—Gurkha.
25. PATHANKOT—Gurdaspur—A very ancient Fort. Hindi coins of the 1st Century found in it.
26. PESHAWAR—Fort of Balla Hissar of sun-dried brick—Muhammadan.
27. PHILLOUR—A Fort built by Ranjit Singh.
28. RAMGURH—Hindu—Gurkha.
29. RANIGAT—Eusofzai, Peshawar—Early Buddhist, with Græco-Bactrian remains. Strong hill fort.
30. ROTAS—Jhelum—Massive fort built by Shir Shah; covers 260 acres—Muhammadan.
31. SHABKADAR—Peshawar—Sikh. Now held by the British.
32. SHER SHAH—Multan—River fort on the Chenab—Muhammadan.
33. SHORKOT—North-west of Multan—A very ancient Fort. Greek coins found; also a quantity of moulded bricks.
34. TANK—Dera Ismail Khan—Fort of mud. Sir H. Durand lost his life here.

North-Western Provinces and Oudh.

35. AGRA—Muhammadan. Built by Akbar.
36. ALIGARH—Originally Hindu—Enlarged by the Mahrattas.

North-Western Provinces and Oudh—contd.

37. ALLAHABAD—Muhammadan—Akbar, A.D. 1575.
38. BARANA—65 miles west-south-west of Agra—Old Hindu Fort. Added to by Muhammadans and Jats.
39. BARIGARH—in the Banda District—Fort of Chandel Rajas.
40. BATHSWAR—43 miles south-east of Agra—Hindu Fort.
41. BHIND—Near Etawah—Hindu Fort.
42. BIJAIGARH—Mirzapur—Hindu; ruined.
43. CHARKHERI—Near Mahoba, Banda—Muhammadan.
44. CHUNAR—Mirzapur—Hindu; used.
45. GARHĀ—in Sultanpur District, Oudh—formerly Hindu.
46. HATHRAS—Aligarh—Hindu; ruined.
47. JAGNER—Agra—36 miles south-west of Agra, on a hill 400 feet high, covered with remains of temples, &c. Has a gateway dated A.D. 1571, but the fort is Ancient Hindu.
48. JALAON—Small Hindu Fort. Remains of fine buildings inside.
49. JAYTPUR—Banda District. Remains of Mahratta Fort enclosing numerous dressed granite carvings.
50. KALINGAR—Banda—Hindu, 7th Century A.D. Fortifications dismantled A.D. 1866. The site is covered with interesting remains.
51. KASIA—35 miles east of Gorakhpur—called Māthā-kuar-ka-kot—Buddhist.
52. MARPHU—in the Banda District—Fort of Chandel Rajas.
53. MAUDHA—in the Hamirpur District—Fort of Chandel Rajas.
54. NALAPANI—Delita Dun—Gorkha, A.D. 1814.
55. NIMSAR—Lucknow—Muhammadan, A.D. 1362. Built on a Hindu foundation.
56. RAGAULI—Banda—Hill Fort and 1,300 feet above sea—Hindu.
57. RAI BARELI—Muhammadan, 15th Century A.D. Has some handsome tombs and mosques.
58. RAJGHAT—Benares—Erected by the British, A.D. 1837.
59. RAMNAGAR—Rohilkhand—Old Hindu Fort, with 54 bastions.
60. SHAHJAHANPUR—Muhammadan.
61. SIRAKAT—Kumaun—Hindu. Strong, but without water-supply.
62. UJAIN—near Kashipur in the Moradabad District—Buddhist.

Bengal and Assam.

63. BARABATI—Cuttack—Hindu, 14th Century A.D.; almost ruined.
64. BENGARH—Purneah District—Hindu, B.C. 37; ruined.
65. BESARH—Patna—Buddhist. Large deserted Fort.
66. BIHAR—Gya—Buddhist. Massive walls.
67. CALCUTTA—(Fort William)—British.
68. DURDURIA—Dacca District—Hindu; 2 miles in circuit; contains remains of buildings.
69. GHOLGHAT—Remains of a Portuguese Fort, which grew into Hugli.
70. JANOGARH—in Orissa—Buddhist. Asoka Inscriptions.
71. MONGHYR—Muhammadan.
72. RAJAGIRAH—Patna—Ancient Buddhist; in ruins.
73. RAMGARH—South of Hazaribagh—Buddhist contains an Asoka Inscription.
74. ROHTASGARH—Shahabad—Ancient Hindu; 1,490 feet high, 28 miles in circuit; contains many interesting buildings.
75. GARHGAON—Sibsagar, Assam—Hindu.

Rajputana.

76. AMBER—Jaipur—Hindu.
77. BHAINSROR—Udaipur, on a rock—Hindu.
78. BHARTPUR—Hindu, A.D. 1733.
79. BHATNAIR—Bikaner—Old Hindu.
80. BHAT-KA-DUNGR—A circular aboriginal fort—Jaipur State, 2 miles south-west of Nain.
81. BIKANER—Hindu, $3\frac{1}{2}$ miles circuit. Good condition and massive.
82. CHITTORE—Early Rajput.
83. DEOSA—Jaipur State—32 miles east of Jaipur city on the top of a hill—Hindu.
84. DIG—Deeg—Bhartpur—Hindu.
85. JAIPUR—Tiger Fort—Hindu.
86. JAISALMER—Hindu; 250 feet high; strong.
87. JODHPUR—Hindu, A.D. 1549.
88. RAJGARH—Uwar State.
89. RANTAMBORE—Jaipur State.
90. TARAGARH—Ajmir—Originally Hindu.

Central India.

91. AJAIGARH—Bundelkhand Agency—Fort of Chandel Rajas.
92. BHILSA—Bhopal—Hindu.
93. CHANDERI—Gwalior—Ruins; Hindu.
94. GWALIOR—Gwalior—Hindu.
95. IRICH—Central India on the Betwa, north-east of Jhansi, formerly Hindu—Captured by Akbar.
96. JAHAZ—Gwalior State.
97. JHANSI—Gwalior—Hindu; naturally strong position.
98. LAHAR—Central India between Gwalior and Jalaun—Mahratta.
99. MANIGARH—Bundelkhand Agency—Fort of Chandel Rajas.
100. RAHATGHAR—East of Bhopal—formerly Hindu, containing ruins of an extensive Palace.
101. RAISIN—Bhopal—Hindu.
102. UDAMPUR—near Bhilsa—Hindu, Muhammadan.
103. SINDWA—Mahratta, one mile in circuit.

Central Provinces.

104. AJMIRGARH—Mandla—Hill Fort.
105. ASIRGARH—Nimar—Hindu; strong.
106. BALLAPUR—Chanda—Hindu.
107. BALOD—Raipur—Hindu.
108. CHAMAGARH—Narsingpur District—Hindu; ruined.
109. DEORI—Saugor—covering 3 acres—Hindu—1713; 1,700 feet high; occupied by Police, &c.
110. DHAMONI—Saugor—Hindu, 1600; 52 acres.
111. DONGARGARH—Ripur—Hindu; 4 miles circuit; no remains of buildings.
112. GARHA—Near Jubbulpore—Fort of Chandel Rajas.
113. GARHAKOTA—Sagar—Hindu, 1629.
114. HATTA—North of Damoh—formerly Hindu.
115. KOSGAIN—Bilaspur—Hindu.

Central Provinces—contd.

116. LAPHAGARH—Bilaspur District—Hindu; part of the Fort remains in good preservation.
 117. MANDLA—Hindu—see Grant's Central Provinces Gazetteer.
 118. PAUNI—South-East of Nagpur—Hindu.
 119. RAHABGARH—Sagar—Hindu; large Fort with many buildings.
 120. RAIPUR—Hindu, A.D. 1460; a mile in circuit.
 121. SAGAR—Mahratta Fort—covering 6 acres.
 122. SINGAURGARH—Jubbulpore, on a high hill—Hindu, A.D. 1540; remains of the Fort are extensive.
 123. TEPAGARH—Chanda—Hindu; 2,000 feet above the sea.
 124. UMRER—Nagpur—Hindu; partly ruined.

Bombay Presidency.

125. AHMADNAGAR—Deccan—Muhammadan, A.D. 1559; $1\frac{1}{2}$ miles in circuit.
 126. BIJAPUR—Kaladgi—Muhammadan.
 127. BUEKKUR—Sind—Muhammadan.
 128. CHAMPANER—Panch Mahals—Large and strong; Hindu.
 129. DAMAN—Portuguese Settlement—In Guzerat, two Forts: "Damao Grande," "Damao Piquent."
 130. DHARWAR—Hindu, A.D. 1403; falling into ruins.
 131. DHULIA—Khandesh—Hindu.
 132. DIU—Portuguese, A.D. 1545; in good preservation.
 133. DOHAD—Panch Mahals—Muhammadan, 15th Century; strongly built.
 134. HARISCHANDRAGARH—Ahmednagar; 3,869 feet above the sea.
 135. IMARGARH—Khairpur State, Sind. Blown up by Sir C. Napier.
 136. JUNNAR—Poona—Muhammadan, A.D. 1436.
 137. PURUNDHAR—Poona, on a hill, 4,472 feet above sea—Hindu; afterwards occupied by Mahrattas.
 138. RAIGARH—Thana—Hindu; eventually taken by Mahrattas.
 139. RAIRI—Ratnagiri—Mahratta, A.D. 1662.
 140. PAROLA—Khandesh—Hindu.
 141. PARTARGARH—Satara—Mahratta.
 142. PAWARGARH—Panch Mahals, on a hill, 2,800 feet above the sea—Jain; afterwards occupied by Muhammadans, who erected buildings.
 143. PAWANGARH—Kolhapur—Hill Fort—Hindu.
 144. SATARA—On a hill—Mahratta.
 145. SEHWAN—Karachi—Sind, old fort, said to be of Alexander the Great.
 146. SHIVNER—Poona—Mahratta.
 147. SHOLAPUR—Muhammadan, A.D. 1345.
 148. SONGARH—Baroda—Hindu.
 149. SURAT—Built A.D. 1373, rebuilt A.D. 1546.
 150. SINHGARH—Poona—Hindu.

Berars.

151. BALAPUR—Muhammadan, A.D. 1757; large and strong.
 152. GAWILGARH—Ellichpur—Muhammadan, A.D. 1490. Fort dismantled A.D. 1853.
 153. NARNALA—Ellichpur, on a hill, 3,161 feet above sea; extensive fortifications—Jain; afterwards added to by Muhammadans; interesting ruined buildings in the Central Fort.

Haiderabad.

154. DAULATABAD—On a rock—Hindu (Deogiri); large Fortress.
 155. GOLCONDA—Fort used as the Nizam's Treasury.
 156. NALDRUG— $1\frac{1}{2}$ miles in circuit, on a rock 200 feet high—Early Hindu.

Maur.

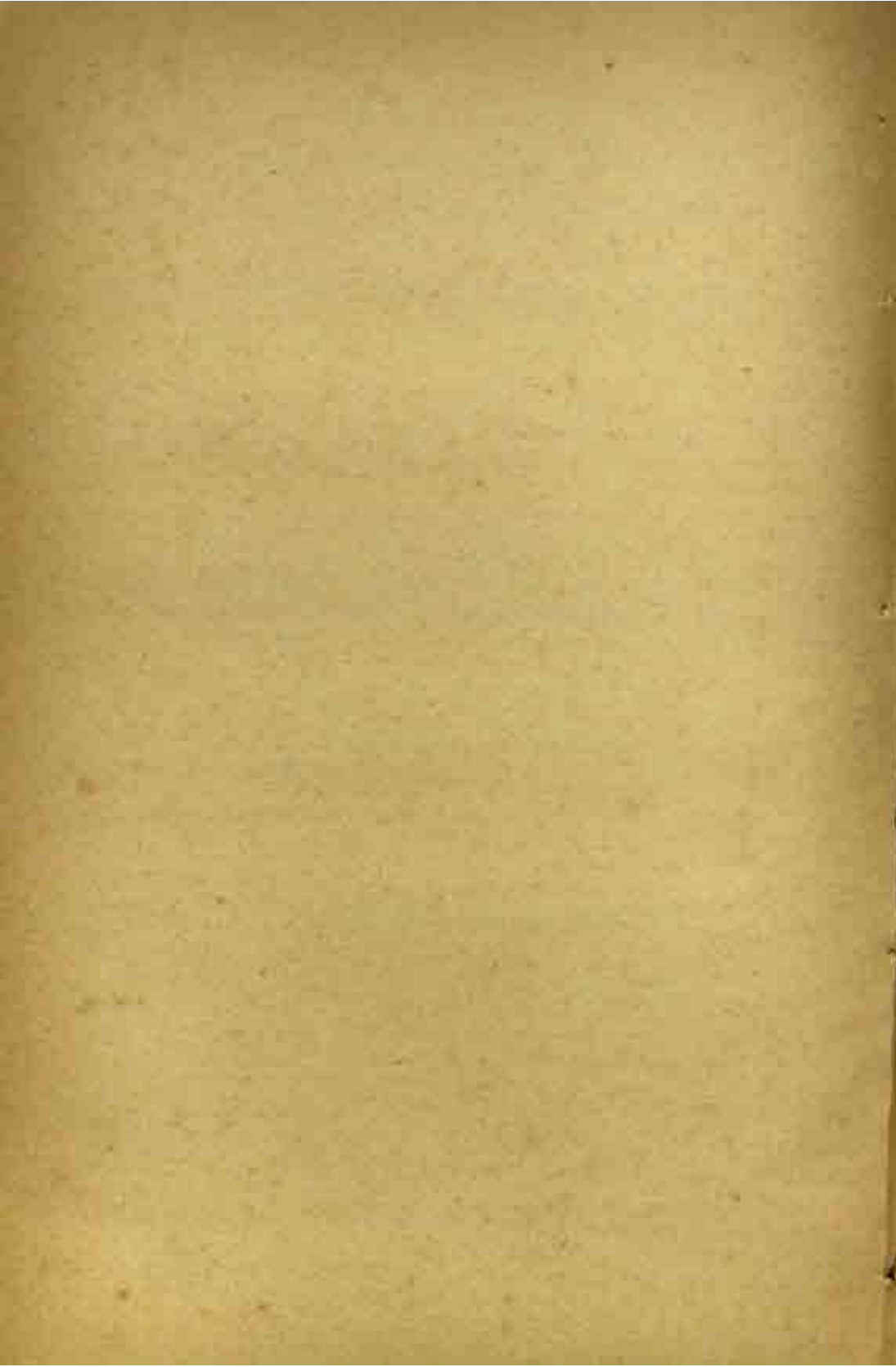
157. BADIHAL—Chitaldrug—Hindu, 16th Century A.D.
 158. BANGALORE—Hindu, A.D. 1537.
 159. CHIKBALLAPUR—Kolar—Hindu, A.D. 1479.
 160. CHITALDRUG—Nagar—Hindu, A.D. 1508.
 161. DODLALBAPUR—Bangalore—Hindu, 14th Century A.D. In the Fort are the remains of several fine buildings and tanks.
 162. MAISUR—Hindu.
 163. NANDIDRUG—Kolar, on a hill, 4,810 feet above the sea—Hindu; added to by Muhammadans.
 164. SAVANDRUG—Bangalore—Hindu.
 165. SERINGAPATAM—Hindu, A.D. 1454; existing fortification constructed by Tipu Sultan.
 166. SIRA—Tumkur—Muhammadan.

Madras.

167. ARCOT—Hindu—Now almost ruined.
 168. ARIA KUSSUM—Near Pondicherry—Hindu.
 169. ARNI—North Arcot—Hindu; in ruins.
 170. ATUR—Salem.
 171. AMBERDRUG—North Arcot, Madras.
 172. BELLARY—Hindu, 15th Century A.D.; strong.
 173. BOBBILI—Vizagapatam—Hindu.
 174. CANNANORE—Malabar—Hindu.
 175. CHAITPET—South Arcot District—Hindu.
 176. CHANDRAGIRI—North Arcot—Hindu, A.D. 1510.
 177. CHINGLEPUT—Hindu, 16th Century A.D.
 178. CHETVAL—Malabar—Dutch, A.D. 1717.
 179. COCHIN—Malabar—First European Fort in India, Portuguese, A.D. 1503; now ruined and occupied by a light-house.
 180. COVELONG—Chingleput—Muhammadan, A.D. 1745; blown up in A.D. 1752 by Clive.
 181. CUDDALORE—South Arcot—Muhammadan; in ruins.
 182. FORT ST. DAVID—South Arcot, 17th Century A.D. Parts in good preservation; is a landmark for mariners.
 183. DEVIKOTTA—Tanjore on the coast at the mouth of the Coleroon River. An early settlement of the Company; ruined.
 184. DHARAPURAM—Coimbatore. Fort dismantled in A.D. 1702.
 185. DINDIGAL—Madura, on a rock, 1,223 feet high—Hindu. Was occupied by the British until A.D. 1860; great natural strength.
 186. GANDIKOT—Cuddapah District, 1,670 feet high—Hindu, A.D. 1589.
 187. GANJAM—Company's Fort, A.D. 1768.
 188. GOOTY—Bellary—Mahratta, 16th Century A.D.
 189. GURRAM KONDA—Cuddapah—Hindu.
 190. GINGI—South Arcot—Hindu, A.D. 1442. Several fine buildings in the Fort.

Madras—contd.

191. KANYAGIRI—Nellore—Hindu, 13th Century A.D. ; on a hill 1,500 above the sea. There is an ancient temple here.
192. KARANGULI—Chingleput.
193. FORT ST. GEORGE—British, A.D. 1609.
194. PALGHAT—Malabar—Hindu.
195. PENNAKONDA—Bellary—Hindu ; afterwards occupied by Muhammadans, who left many buildings.
196. PERAMAKAL—South Arcot—Hindu ; on a hill 370 feet high.
197. RAIDRUG—Bellary—Hindu.
198. TANJORE—Hindu—Occupied by Mahrattas.
199. SANKARIDRUG—Salem—Hindu ; very strong.
200. SATYAMANGALAM—Coimbatore—Hindu.
201. TELLICHERI—Malabar—Hindu ; used as a jail.
202. TIJAR—South Arcot—Old Hindu.
203. TRANQUEBAR—Tanjore—Built by the Danes, A.D. 1624.
204. TRIVANDRUM—Travancore—Hindu ; full of quaint wooden buildings.
205. VELLORE—North Arcot—Hindu, 1500 ; strong. Has a beautiful temple inside.
206. VINUKUNDA—Kistna—Old Hindu.



PRESERVATION OF NATIONAL MONUMENTS.

THIRD REPORT

OF THE

CURATOR OF ANCIENT MONUMENTS

IN

INDIA,

FOR

THE YEAR 1883-84.



CALCUTTA :

PRINTED BY THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA.

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ERRATA.

Page 2, para. 8, for "have now asked the Supreme," &c., read "have asked the Supreme," &c.

Page 3, para. 11, for "V to X" read "U to X."

Page 24, para. 30, for "old mint buildings of debris," read "old mint of debris."

In page xcvi, Appendix E, para. 13, 3rd line, for "and I merely repeat," read "and merely repeat."

Page cxvi, para. 1, for "according to the buildings they belonged to," read "according to their buildings."

Page cix, para. 1, for "their sculptured bas-reliefs often contain represent buildings," read "their sculptured bas-reliefs often represent buildings."

In page cxiii, Appendix I, under heading Plate No. 14, 2nd para., 2nd line, for "sways," read "swags."

In page cxiv, Appendix I, under heading Plate No. 17, last line last one of paragraph, for "atlas-like," read "Atlas-like."

Page cxv, plate 23, for "parially" read "partially."

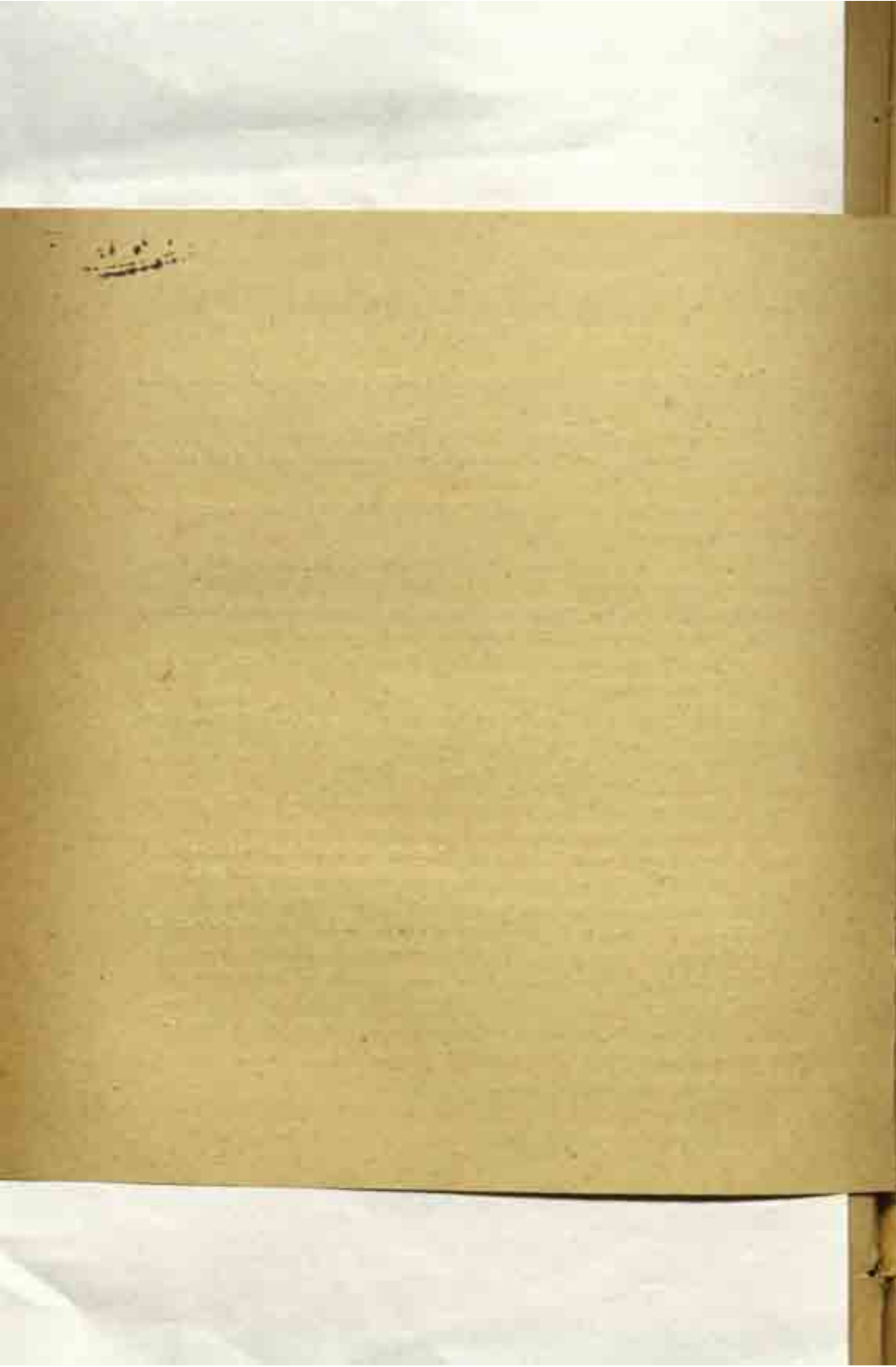
Page cxvi, plate 27, for "Jatakas, or birth-stones of Buddha," read "Jatakas or birth-stories of Buddha."

Page cxxxiv, para. 1, for "Kutub Minar, stands 10 miles from Modern Delhi, and is surrounded" read "Kutub Minar, 10 miles from Modern Delhi, is surrounded."

Page cxiii, para. 24, for "is dedicated to Vishnu, called Ranganath Swami," read "dedicated to Vishnu is called Ranganath Swami."

Page clxv, (Xylia-Dulia-Biformis, the Iron Tree) should be inserted after "Jambu" in para. 11.

Page clxv, para. 12, for "irregular in outline in plan and with a flat roof" read "irregular in outline and with a flat roof."



THIRD REPORT

OF THE

CURATOR OF ANCIENT MONUMENTS IN INDIA,

FOR THE YEAR 1883-84.

WORK OF THE CURATOR'S OFFICE.

On my return to head-quarters the 8th April 1883, I employed the office establishment in fairing out surveys made at Chittore, Mandhatta, Ajmir, Lahore, Gwalior, Sanchi, and in completing the drawings of Madras temples. Up to the 3rd of July I occupied myself with the illustrated report on explorations in Yusufzai.

2. I had intended going on tour during the rains, but the receipt of a letter from the Government of India, enclosing for my opinion a draft resolution directing Local Governments to themselves provide the means for preserving buildings and monuments of importance, made it necessary to hurry the completion of the second annual report for 1882-83, without which my reply would have been incomplete.

3. It was not until the 22nd September that I was able to send in an answer upholding the advantages of a central office, *i.e.*, (1) economy in one referee instead of several; (2) uniformity in remedies throughout the country assured; (3) continuity in operations more probable; (4) systematic custody constantly advocated; (5) attention invited to monuments in Native States; (6) the best structures of their class in India repaired; (7) economical expedients suggested and experience reaped in one Province made available for the benefit of other Provinces; (8) Indian architecture dealt with as a whole; (9) illustrations produced of the general subject of Indian architecture.

Past experience shows that, without encouragement from the Government of India, Local Governments will do little or act spasmodically.

4. I left Simla on tour the 25th October 1883, reached Mardan on the 29th, and was engaged for six weeks on explorations in Yusufzai and then proceeded to Lahore to arrange the sculptures found during the two seasons.



Issue of the
Resolution.

5. The issue by the Government of India of the Resolution referred to took place on the 26th November 1883, and by its orders the conservation of ancient monuments was handed over to Local Governments, who were informed that my services would not be available in the capacity of Curator after the term of three years, for which the appointment had received the sanction of the Secretary of State. This decided me to confer personally with the Supreme Government.

Proposed joint
provincial
establishment.

6. I arrived in Calcutta on the 1st of January 1884, remained there during the month, and was told unofficially that the Government of India would be disposed to favour the employment of my services by several Local Governments as their superintending officer. I accordingly made arrangements for visiting and addressing the Local Governments and Administrations of Northern India, including Bengal, the North-Western Provinces and Oudh, the Punjab, and the Agencies of Rajputana and Central India. I submitted no proposals to Southern and Western India.

Via to N.-W.
Provinces and
Oudh, Punjab,
Central India,
and Rajput-
ana.

7. I met Colonel Bannerman, the Officiating Agent to the Governor General in Central India, in camp at Mandu near Mhow, and remained with him from the 7th to the 10th of February. I then proceeded to Allahabad, to see Sir Alfred Lyall. On my way up-country I stayed at Agra and returned to head-quarters to start a portion of my establishment on fairing out rough field surveys. Early in March I went to Lahore in order to confer with the Lieutenant-Governor of the Punjab, and from thence journeyed to Nimbehara in Rajputana to keep an appointment with Colonel Bradford, Agent to the Governor General. On my return I stayed at Ajmir, Jaipur, and Delhi, reaching head-quarters on the 16th of March.

Applications
from Local
Governments.

8. The North-Western Provinces and Oudh, the Punjab, Rajputana, and Central India have now asked the Supreme Government for my services to superintend the conservation of their ancient monuments.

Allotment of
funds.

9. The allotments from Imperial funds during 1883-84 have been as follows:—

	R
Madras, for Bijanagar, Seven Pagodas, Amravati	10,000
Punjab, for Lahore and Delhi	19,892
Military Works, for Chunar Fort	300
Bengal, for Sasaram and Gaur	5,185
North-Western Provinces and Oudh, for Sikandra	2,500
Rajputana, for Ajmir	5,000

Carried over 42,877

	R
Brought forward	42,877
Central India, for Mandu, Sanchi, and Gwalior	5,619
Bombay, for Ahmedabad and Bijapur	5,000
TOTAL	53,496

10. Besides the above grants, a sum of Rs. 5,000 has been sanctioned for reproduction of drawings prepared in my office. Reproduction of drawings.

11. Monographs to accompany these plates describing the various buildings illustrated are quoted in the appendices E to R and V to X. Monographs to accompany published plates.

MADRAS.

12. On the 23rd July 1883 the Madras Government sanctioned an estimate drawn up by Mr. F. C. Black, Assistant Engineer, Archaeological Works, Madras, for repairs to the monuments of antiquity at Mahavellipur. Seven Pagodas.

	R
Alaiva or Shore Temple	453
Krishna Mandapam	504
An unfinished rock excavation	80
Kapalisvara Mandapam	44
Ganesh Temple	32
Vishnu Temple	83
Raval Gopuram	9
Mahishmardini Mandapam	165
Olak Anesvara Temple	101
Draupadis and Dharmarajas Ratha	11
Bhima's Ratha	89
Six caves	371
Watchmen and contingencies	286
TOTAL	2,228

This estimate provided for carrying out recommendations submitted in the first annual report for 1881-82, pages cxiii to cxvii. During its preparation in May, June, and July 1883, Mr. Black excavated the Alaiva or Shore Temple and made some interesting discoveries of inscriptions, also of portions of the temple that had become buried in sand.

13. The allotment of the available funds was disposed of by an order of the Madras Government, dated the 20th July 1883, as follows: "Major Cole has made an offer of Rs. 10,000 on behalf of the Government of India for conservation of monuments generally. This, with the Rs. 5,000 Allotment of funds.

promised by the Local Governments, will admit of an expenditure of Rs15,000 in the current official year, which it is proposed to distribute as follows:—

	R
Mr. Black's salary, &c.	7,000
For Hampi work	4,000
„ Amravati work	2,400
„ Seven Pagodas	1,600
TOTAL	<u>15,000</u>

Mr. Black's
work.

14. On the 31st July 1883, I suggested that Mr. Black should work at the Seven Pagodas during November and December and then proceed to Amravati for actual operations. This the Government approved.

Governor's
Orders on the
Palace at
Chandragiri.

15. His Excellency the Governor visited Chandragiri in July 1883, and an extract from his Minute dated the 4th August 1883, was forwarded for my information.

“The Chandragiri Palace, so closely connected with our history in South India, is a fine thing. It should be carefully kept in the state of ruinous but not unsightly repair in which it now is.”

BOMBAY.

Ibrahim Raja
Masjid.

16. On the 29th June 1883, the Executive Engineer, Bijapur, reported that a part of the cornice of the east front of the Ibrahim Raja Masjid had fallen (see page cx, Report for 1881-82, and page xciii of the Report for 1882-3). In the absence of any sanctioned estimate for repairing the building, I recommended that the loose or shaky cornice corbels be taken down, so that eventually they might be rebuilt in their places.

Grant for
Bijapur.

17. A sum of Rs2,000 was allotted out of my Budget for the following repairs at Bijapur:—

	R	
Gagan Mahal Gateway	755	} The actual expenditure has been Rs1,890.
Mecca Masjid	336	
Mehtari Mahal	150	
Ibrahim Raja (Tomb)	759	
TOTAL	<u>2,000</u>	

The estimates for the first three had been sanctioned in December 1882 (see page xcvi, Report, 1882-83), but the latter work was for precautionary props to the stone cornices of the inner verandah of the Tomb. I noticed in my Report

for 1882-83, page xciv, the unsatisfactory repairs at Bijapur; but I do not see how such repairs can be satisfactory if Architectural considerations are neglected.

18. A sum of Rs. 3,000 was allotted for repairs to Syud Usman's Mosque and Tomb at Ahmedabad, the estimate for which, amounting to Rs. 12,296, had been sanctioned in 1882. Grant for Ahmedabad.

19. Repairs were sanctioned in November 1883 to the gateway of the Fort of Pratabgad amounting to Rs. 141, and the estimate was referred to me; but as I had not seen the building or a photograph of it, I was unable to judge of the architectural value of the structure. Fort of Pratabgad.

20. I procured some photographs of the ancient gateways and buildings at Dabhoi in the Baroda State. They are most beautiful architecture of the Jain style of the 10th century, A.D., and the structures should be kept in repair, the carvings, if necessary, being cleaned. Ancient buildings at Dabhoi, Baroda.

21. My time for inspections being short this year, I was unable to visit the buildings, &c., in the Thana District mentioned in para. 5 of page xc, Report for 1882-83. Thana District.

BENGAL.

22. A sum of Rs. 5,185 allotted out of my Budget for 1883-84 for repairs to Shir Shah's Tomb and the Gaur ruins, was partially utilised by Mr. Beglar in the following manner:— Alotment for Shir Shah's Tomb and Gaur.

	R
Shir Shah's Tomb	2,479
Gaur and Panduah	1,807
	<hr/>
TOTAL	4,286
	<hr/>

23. In the early part of the year a Provincial grant of Rs. 10,000 was spent in repairs to the Raja Man Singh's Palace buildings at Rhotasgarh, but I have not been able to visit the place. Repairs at Rhotasgarh.

24. As regards the repairs in 1882-83 to Shir Shah's Tomb, I have already recorded an opinion at page xcvi of my Second Report for 1882-83. Mr. Beglar's tendency is to run heavily into bricks and mortar, which is not only expensive but apt to be injudicious. My position in regard to the Bengal Government did not give me power to prohibit or order any work; I gave my advice only. A recommendation Repairs to the Tomb of Shir Shah.

to remove the square cupola on the dome has, however, been carried out, and Mr. Fergusson takes me to task for the advice.

The evidence is as follows :—

- i.—A drawing made by Captain Elliott, R.N., of Shir Shah's Tomb, published as an engraving in 1834, shows the *finial to have fallen*, only a piece of iron or stone is protruding from the top of the dome at an angle. Captain Elliott must have made the sketch in the time of Lord Minto, *i.e.*, about 1810.
- ii.—Therefore the cupola on four pillars shown in my sketch, page xcvi of the Report for 1882-83, is a *repair*, and as I saw at a glance a modern addition.
- iii.—Martin's "Eastern India" has an engraving dated 1838 showing a four-pillared kiosk on the dome, —the inference being that the drawing was made later than Captain Elliott's sketch and after the repair.
- iv.—I find at page 148 of *Travels in India during 1780-83* by William Hodges, R.A. (published by Edwards, Pall Mall, in 1794), that he describes Shir Shah's Tomb (the italics are mine): "The plan of this Mausoleum is a *square* base, rising from the centre of the lake, having at each angle *pavilions crowned with domes and finished with a cullis*; from this base was a bridge, that from the ruins now remaining must have consisted of *six pointed arches* which communicated to the side of the lake, and on two sides are a double flight of steps to the water; on the base is raised an *octagon building*, having three pointed arches in each face, and on *each angle are pavilions finished like the former*. Somewhat behind this runs an octagon, ninety-two feet in diameter, and from the extremes spring the dome *which is finished on the top by a small pavilion like those already described*." These latter exist and are polygonal, the inference being that Hodges saw a polygonal pavilion crowning the dome between 1780 and 1783.
- v.—The evidence in other buildings of the Afghan style is, that where there was a lantern or cupola crowning a dome it is on four pillars when the building is square in plan, and on eight pillars or eight-sided when the building is octagonal in plan.

The Tomb of Mubarak Shah at Delhi, A.D. 1433; is octagonal in plan, the dome being finished by a cupola on eight pillars.

The Tomb of Alawaldin at Tijara near Ulwar, A.D. 1517, is octagonal in plan, the dome being finished by a cupola on eight pillars.

The Tomb of Fateh Jang at Ulwar, A.D. 1547, is square in plan, and the dome capped by a kiosque on four pillars.

The Tomb of Makdum Shah Daolat at Monear on the River at Sone (Akbar's time) has a dome raised on an octagonal base and surmounted by a lantern with eight sides.

To remove the square pavilion from Shir Shah's Tombs, which is octagonal in plan, would therefore appear to be correct. It now remains to replace it by a finial of the original design.

25. As regards the work at Gaur and Panduah, I addressed the following remarks to the Bengal Government: "Mr. Beglar, under your instructions, has referred his estimates for maintaining the Gaur and Panduah buildings to me. They are as follows:—

Repairs at
Gaur and
Panduah.

R		R	
Adina Masjid	43,804	46,547	} Panduah.
Eklakhi Masjid	2,719		
Sona Masjid	24		
<hr/>			
The Jhanjhania Masjid	2,114	24,009	} Gaur.
" " Durgah	250		
Kadam Rasul Gate	800		
" " Durgah	591		
Minar	1,863		
Gunmant Masjid	200		
Daras Bari	531		
Bara Sona	4,907		
Lattan Masjid	4,303		
Chhota Sona Masjid	200		
Tantipara Masjid	250		
Bera Masjid	4,000		
Dakhil Masjid	4,000		
<hr/>			
Contingencies		3,528	
<hr/>			
TOTAL		74,084	

"(2) I have conferred personally with Mr. Beglar on the subject of these estimates, and have the honour to remark that it is not possible for me to submit a detailed opinion on them without examining the buildings. I am, however, satisfied that excavating the enormous amount of earth which fills and surrounds the Adina Masjid at Panduah

is a very proper work to sanction, also that providing temporary accommodation in the Kadam Rasul gateway at Gaur for the officer in charge of the repairs, is unobjectionable. The total estimate for repairing the fine old Adina Masjid at Panduah comes to Rs 43,804—this includes Rs 6,071 for removing the earth and debris from the interior and exterior—and I would recommend the expenditure of Rs 1,200 before the end of the current financial year on this item. The estimate for the accommodation in the Kadam Rasul gateway amounts to Rs 800, and I recommend this to be sanctioned.

"(3) I provided a sum of Rs 2,000 out of this year's Budget for commencing the Gaur work, and the requisite funds for the works specified are therefore available."

It seems to me that Rs 74,084 is a large sum to spend on these buildings. The first steps should be to clear all the jungle from them, to clear the buildings of debris, to preserve those portions of buildings that can be replaced or are of interest, to repair roofs to prevent the infiltration of rain, to prop up walls that threaten to fall, to clean off dirt, plaster or white-wash from all ornamental or inscribed masonry, and to secure such ornamental parts in their places.

Future
arrangements
for conserving
monuments in
Bengal.

26. I addressed the Bengal Government, in January, on the subject of future arrangements for conserving monuments in the Province, and was informed in March that all probable wants can be met by the existing establishment of the Public Works Department. Later, in April, the Government stated that there were no funds available for such purposes.

CENTRAL INDIA.

Cost of the
Sanchi
repairs,
1882-83.

27. The cost of the operations at Sanchi, detailed at pages c to ciii of my Report for 1882-83, is as follows:—

	R	₹	p.
Material	4,113	10	0
Labour	7,650	11	8
Major Keith's pay	2,352	10	8
Temporary Establishment	3,078	5	2
Miscellaneous	205	8	6
TOTAL	17,400	14	0

Repairs at
Gwalior.

28. After leaving Sanchi in April (see Appendix E), Major Keith went to Mussoorie to write his report which I have never received. He returned to Gwalior on the 20th of

July and drew up estimates for repairs in the fortress to the following:—

	<i>R</i>	<i>a.</i>
Roof of the Sas Bahu Temple	762	8
Roof of the Teli-ka-Mandir Temple	1,668	0
Establishment	488	0
TOTAL	2,918	8

Funds were provided and the work put in hand, Major Keith being engaged up to the end of December 1883 (see Appendix F). During the latter months Major Keith was employed by the Local Administration in collecting Central India exhibits for the Calcutta Exhibition.

29. During my stay at Mandu with Colonel Bannerman, Officiating Agent to the Governor General in Central India, I addressed the following to him: "I have the honour to suggest that the various protective remedies that may be applied to the old mosques, tombs and palace buildings at Mandu, be carried out under the Political Agent, Bhopawar. His Highness the Maharajah of Dhar has, it is true, opened out a number of approaches to the ruins and constructed a driving road from Nalcha. As you observed yourself during your stay at Mandu the repairs to the buildings are unsatisfactory, and slabs of stone and marble have been taken from some of the most interesting structures. It is, I submit, most desirable that any available funds for repairs be laid out to the best advantage, and that the wanton destruction of the buildings be stopped.

"(2) I have asked the Comptroller of India Treasuries to place a sum of $\text{R}1,200$ at the disposal of the Political Agent, Bhopawar, for the Mandu buildings, and hope that the Supreme Government will make a further contribution next financial year. It would be better if the Maharajah of Dhar could be induced to contribute a sum of money to be made over to the Political Agent in place of the repairs, on which he was been engaged for the past three or four years.

"(3) Pending any future arrangements which the Governor General in Council may sanction in regard to the conservation of ancient monuments in Native States, I would recommend that the $\text{R}1,200$ allotted this year for Mandu be applied, under the direction of the Political Agent, in clearing the buildings of debris, in removing overgrowth and jungle from walls and roofs, and in making approaches to the various

groups of buildings, some of which are almost inaccessible from density of jungle.

"(4) The accompanying sketch map shows the more important buildings at Mandu, but others may be discovered. I submitted some general recommendations in a note dated 5th January 1881,¹ a copy of which is annexed, but the following works should, I think, be undertaken before actual structural repairs are begun:—

"*Jama Masjid*.—Clear the courtyard of debris; remove the rough masonry partitions in the colonnade.

"*Tomb of Hoshang Ghorī*.—Clear the enclosure of weeds and debris; clean the blackened marble.

"*Chota Jama Masjid*.—Clear the colonnade and courtyard of cattle, debris, and vegetation; provide plain wooden doors at the entrances.

"*Palace of Bāz Bahadur*.—Clean out the tank in the courtyard.

"*Daria Khan's Buildings*.—Open out a path; clear jungle and debris. The marble Mosaic tombstones in the principal tomb should be cleaned.

"*Lāl Bangla*.—Open out approaches; clear jungle and debris.

"(5) It is, I think, most necessary to appoint a chowkidar to see that buildings are not mutilated or used for cattle."

Repairs at
Mandu.

30. The operations at Mandu have since been in progress under Lieutenant-Colonel Biddulph, Political Agent, Bhopalwar, and the Maharajah of Dhar has generously contributed ₹2,000 for Mandu and ₹150 for repairing the Lāt Masjid at Dhar (see page clxv of the Report for 1881-82). Writing on the 11th March, Colonel Biddulph informed me what he had done at Dhar and Mandu. The cattle had been turned out of the Chota Jama Masjid, and an allotment of ₹100 made for work. An allotment of ₹100 was made for the Dhāi-ka-Mahal and Dai-ka-chota-bain-ka-Mahal to fit them with doors, outroot pipal, stop cracks, clear debris and jungle. ₹35 were given for clearing the sarai near the Chota Jama Masjid, ₹100 for clearing the tank of Bāz Bahadur's Palace, ₹60 for clearing Daria Khan's tomb, ₹100 for removing vegetation from the walls of the Hindu colonnade at Hoshang Ghorī's tomb, and ₹80 for clearing the jungle at Mapeh Khan's tomb. Colonel Biddulph mentions the ruins of a tower of victory (7 storeys high) erected

¹ See page clxii of the Report for 1881-82.

by Mahmud,—a building I have not seen, but which must be one of the most interesting antiquities of the place. Speaking of the Jama Masjid, he proposes to make the domes and roof quite water-tight, to remove all vegetation, to mend a hole in the west wall, remove debris from the quadrangle, clean interior mehrabs or chapels, all marble work, &c., and remove the accumulated debris from under the north wall, outside. This, he says, will make what remains of the place safe, but Rs. 1,000 is much wanted to close gaps in the north and south walls. My Head draftsman, Mr. Supervisor Thompson, was engaged on the Mandu repairs for two months under the Political Agent, Bhopawar.

RAJPUTANA.

31. The surveys of the Jain Tower, Tower of Victory, and Sanga Chaori in the Chittore Fortress were faired out during the summer, a set of 12 large plates being zincographed at the Intelligence Branch of the Quarter Master General's Office. On the 9th of October I submitted copies of the surveys to the Agent to the Governor General together with the following notes:—

*Surveys at
Chittorgarh.*

Report on the Pillar of Victory built by the Rana Khambo of Meywar.¹

(1) The most celebrated monument of Chittorgarh is the Pillar of Victory, erected by the Rana Khambo in commemoration of the defeat and capture of Mahmud of Malwa in A.D. 1439.

(2) It is said to have cost 90 lakhs of rupees, and was built in seven years between A.D. 1442 and 1449. It is throughout of stone, and measures 30 feet wide at the base and 130 feet high or nearly so (the modern dome obscures the actual termination of the original roof). As an architectural object the tower is very varied in outline, whilst its position on the summit of the Chittore Hill gives it all the advantage of great height and command over the surrounding country. The style is Jain and resembles that of the smaller Jain Tower, which is the earliest monument of the Chittore Fortress, but the construction is much more elaborate and peculiar.

(3) In the older example the height is under 80 feet, and the central staircase winds up from base to summit through a central shaft divided up into six floors.

¹ See Appendix G.

(4) But in the present case we have a height of 130 feet, and the staircase passes up the tower through nine floors. The architect was not content with a single central well. The second, third, fourth, fifth, sixth, and seventh floors have each a square compartment in the middle surrounded by a gallery, through both of which the stairs wind alternately.

(5) Each storey is lighted by trellis windows, and the angles and recesses, not intersected by steps, are utilised for sculptured statues and ornaments. The exterior surface of the tower is broken up into nine principal divisions, each furnished with its windows, balustrades and eaves or chujjas, and emphasized by columns, pilasters, and numberless horizontal bands or cornices. The whole is covered with sculptures, and most of the gods of Hindu mythology are represented wherever a niche or panel occurs.

(6) A set of six sheets of plans and drawings are submitted with this note. These show, to scale, the general outline of the various parts of the tower, and the notes in red ink record the present condition of the structure. Plate No. 6 gives in outline the sculptured details of a portion of the exterior walls of the second storey, but the carved figures and ornaments have been omitted from the elevation and section, as their insertion on so small a scale would have obscured and confused the drawings.

(7) The following are my recommendations for repairs :—

Basement.

All vegetation to be completely outrooted.

The surrounding debris of stone to be as far as possible disposed of by rebuilding the broken walling.

The terrace floor surrounding the tower to be repaired.

The masonry steps to be set in order and made passable.

First Floor.

All vegetation to be completely outrooted.

There appears no necessity for renewing the railing along the margin of the surrounding terrace.

The window on the west should be opened out and the masonry removed.

Broken patches of floor to be renewed.

The broken moulding at the south-east corner to be renewed in plain stone.

Plate 6 } Plans.
" 7 } Chajjas
" 8 } and
" 9 } Balustrades.
" 10 } Elevation.
" 11 } Section.
" 12 } Detail.

The broken cornice in the east porch to be renewed in plain stone.

The chujja (shown at O O, plate 3) to be renewed.

There is a crack between the south porch and the main building, which can only be completely remedied by rebuilding the porch, but if this cannot be done, galvanized iron ties should be used to strengthen the walls.

Second Floor.

All vegetation to be completely outrooted.

The chujja at N N to be renewed (see plate 3).

The balustrade opposite the south door to be renewed.

Third Floor.

All vegetation to be completely outrooted.

The broken masonry screen work in windows to be renewed (see plan 1).

The chujjas at M M (see plate 3) to be renewed.

If the image fallen from the niche to the south cannot be found, a plain stone to be inserted.

Fourth Floor.

All vegetation to be completely outrooted.

Balustrades and chujjas at L L and K K to be repaired (see plate 3).

Fifth Floor.

All vegetation to be completely outrooted.

The chujjas and balustrades at J J and H H to be repaired (see plate 3).

Sixth Floor.

All vegetation to be completely outrooted.

The chujjas and balustrades at G G and F F to be repaired (plate 3).

Seventh Floor.

All vegetation to be completely outrooted.

Balustrades and chujjas at E E and D D to be repaired (plate 3).

The damaged column on the south projecting porch to be renewed with plain mouldings.

Eighth Floor.

All vegetation to be completely outrooted.

The brick masonry filling in to be removed and the trellis windows renewed.

The balustrades and chujjas at C C and B B to be repaired (plate 3).

Wooden steps to the lantern of tower, or ninth floor, to be renewed.

Ninth Floor.

All vegetation to be completely outrooted.

Chujja at A A to be renewed (see plate 3).

Dome.

The present plaster dome should be removed, to reveal the original masonry roof which resembles that of the old Jain Tower. It is incongruous in style and was added by the Maharana Sarup Sing to make good injuries done by lightning. Mr. Fergusson sketched the tower with its original termination in 1839. The old roof should be repaired and rendered water-tight. The removal of the plaster will relieve the strain on the lintels and columns below, and it may be found possible to strengthen the masonry with horizontal iron joists and so do away with the rough columns added at the time of the repairs. A lightning-conductor should be placed on the summit of the tower. English copper bands $\frac{3}{4}$ " \times $\frac{1}{8}$ ", with clips and nails for fixing against masonry, cost about Rs. per foot, and finials cost about Rs. The best plan will be to connect the copper bands with the nearest tank so as to be always in contact with the water.

Jain Tower of Sri Allat at Chittore.¹

(1) Major-General Cunningham, Director General of the Archaeological Survey in India, in 1871, unearthed some Jain statues at Muttra which were ascertained to date from the time of Kanishka, (*i.e.*, A.D. 85 to 120), and these appear to be the earliest traces of Jainism yet discovered. Jain architecture attained great perfection between 1000-1200 A.D. at Mount Abu, at Gimar, and elsewhere, but the singular point about the style is that so little is known of the process of its development.

(2) The tower of Sri Allat supplies a very important intermediate example dating 896 A.D., and is dedicated to Adnath, whose representations are repeated many hundred times outside the building. The height of the structures is 76 feet, but was probably 80 feet to the original apex of the roof. A central staircase winds up a square shaft through 6 storeys to the lantern on the top. Sculptures and mouldings

¹ See Appendix H.

cover the exterior from the base to the summit, rendering its appearance most elaborate and picturesque. Many of its architectural forms and details are found to be repeated in Indian temples of a later date. Its preservation is therefore important. Not only is its architecture reflected in the monuments of Chittorgarh itself, but it supplies important evidence of how the Jain style grew anterior to its period of greatest perfection.

(3) A set of the following illustrations accompany these notes:—

- 1 Sheet of Plans.
- 1 Elevation.
- 1 Section.

(4) My recommendations for repairs are:—

- (a) the whole of the vegetation to be completely out-rooted;
- (b) the debris about the base of the column to be removed;
- (c) the carvings to be cleaned throughout, particularly at the lower part of the tower;

Basement.

- (d) the masonry at the corners of the plinth to be renewed without any carving (see plan No. 1 on A A);

First and 2nd Floor.

- (e) the displaced columns and masonry in the niche facing east between B B and C C should be got back into position and tied to the main structure with galvanized iron bars;

Third Floor.

- (f) the masonry in the niche on the stairs to be repaired (see plan No. 3 on C C);

Fourth Floor.

- (g) the window balustrades to the south and west to be renewed in plain stone, and the steps of the stairs to be renewed (see plan No. 4 on D D);

Fifth Floor.

- (h) the face of the north wall which is cracked and bulging should be tied up with galvanized iron bars (see plan No. 5 on E E);

Sixth Floor.

(i) the two corners of the wall to the east which are cracked and bulging should be strengthened with galvanized iron ties (see plan No. 6 on F. F.) ;

Lantern.

(j) a column is missing on the north side of the upper lantern and should be replaced in plain stones (see plan on G G). The roof and ceiling require repair by resetting the old masonry and supplying new eaves, and missing courses to complete the apex. There remains but one of the bracket struts that were inserted between each pair of columns. Plain uncarved struts should be renewed. The missing course of masonry at the floor level on the south side to be made good ;

(k) all loose masonry or cracks to be strengthened with dowels, clamps, or galvanized iron ties ;

(l) a lightning-conductor should be fitted to the apex of the roof when complete.

Report on the Sanga Chaori at Chittorgarh, Meywar.

(1) From an inscription in Sanscrit on the right column of the western door this singular edifice appears to have been erected by the Treasurer of the Rana Khambo in A.D. 1448.

(2) The building is square in plan with projections on all four sides and raised on a plinth some 5 feet in height. Entrances are from the north and west, the sides east and south being filled by trellis windows.

(3) In the centre is a raised platform with columns at the four corners, and along its edges are small water-channels with outlets at the angles.

(4) The centre part of the building is covered by a circular Jain dome built in horizontal layers richly ornamented.

(5) The exterior walls are beautifully sculptured with horizontal bands containing numerous figures and floral scrolls.

(6) The original roof terminations of the central chamber and porches of the building have disappeared. The present plaster coverings look like repairs and are quite plain. There is a perfect figure of Parisnath over the entrance to the west and a less perfect one above the door to the north. The four memorial niches inside the building bear inscriptions, showing that they were placed in position in the years 1455 and 1456 A.D.

(7) Mr. Fergusson notices a building at Barolli in the Kotah State which appears to be of this class¹ —

"The front of the temple is a detached porch here called a chaori or nuptial hall (the same word I believe as choultrie in the south), in which tradition records the marriage of a Huna (Hun) Prince to a Rajputal bride, for which purpose it is said to have been erected, but whether this is so or not, it is one of the finest examples of such detached halls known in the north."

(8) Another example resembling this in plan is the temple of Siddheswar at Mandhatta on the Narbadda, in which, however, there are entrances and porches *on all four sides*.

(9) The Sanga chaori was intended to serve a special purpose, and does not represent any very common type; but the architecture is admirable, and the building, although small, is one of the most attractive in Chittore. It is unfortunately much ruined and used as an entrance to the magazine enclosure.

(10) Massive walls of loose stone abut it on the east and west, thus obscuring part of the beautiful carved exterior.

(11) A set of three zincograph plates accompany this note, illustrating the present condition of the building and the remedies which I suggest for its conservation.

(12) In the first place the wall should be diverted so as to free the structure and permit of a correct appreciation of its design.

(13) All vegetation and tree growth should be outrooted from walls and roofs. It may be necessary to take down parts of the wall to get at the roots.

(14) Cracks in walls should be strengthened with iron clamps and filled up with mortar to prevent fresh vegetation taking root.

(15) No new work should be introduced except where required for strength, and then only in plain unsculptured pieces.

(16) The steps to the north and west should be cleared of debris and made passable.

(17) Displaced portions of masonry should be got back into positions.

(18) The roof and domes should be repaired and rendered water-tight.

(19) The interior of the building to be cleaned out.

(20) The sculptures of the exterior and interior to be cleaned.

¹ See page 149 of Vergerius's "History of Indian and Eastern Architecture."

- (21) The floor to be repaired with stone laid in mortar.
- (22) The raised floors in the two window bays to be repaired.
- (23) The floor of the raised dais in the centre to be repaired.
- (24) These remedies would not be costly or difficult.
- (25) I am indebted to Kaviraja Shamul Dass of Udaipur, who kindly supplied me with transcripts of the inscriptions on the building.

Surveys at
Amber and
Jaipur.

32. A survey party had gone into Rajputana during the cold weather and made detailed plans of the tomb of Fateh Jang at Ulwar, of the curious tombs of the Khanzadas, of the Lodi Emperor at Tijara near Ulwar, and of the famous Palace of the Jaipur Maharajahs at Amber. Very complete plates were prepared, some of which have been reproduced by zincography.

Visit to
Colonel
Bradford.

33. I visited Colonel Bradford's camp at Nimbahera on the 6th and 7th of March, and submitted recommendations for future conservation of antiquities in Rajputana.

Amber.

34. Shortly after, I inspected the work of my survey party at Amber, and regretted to see the inevitable whitewashing going on at the old palace in preparation for the visit of His Royal Highness the Duke of Connaught (see page clxxiv, Report for 1881-82).

Ajmir.

35. In company with Colonel Steel, R.E., I examined the marble pavilion in the Daolat Bagh, Ajmir, now undergoing repair. Out of the grant of Rs. 5,000 allotted from my Budget, Rs. 3,332 have been expended to the 31st March (see paragraphs 7 and 11 of Appendix H, page civ, Report for 1882-83; also paragraphs 17-19, Appendix S, page clxx of the Report for 1881-82).

Kotah.

36. Colonel Bayley, the Political Agent at Kotah, has forwarded to the Agent to the Governor General estimates framed by Mr. T. W. Miles, Executive Engineer, Kotah and Jhallawar—

- (i) for repairing the Kameshore Nath Temple at Ramgarh, amounting to Rs. 7,323;
- (ii) for repairs to the chattri on the bund of the Ramgarh Tank, Rs. 448;
- (iii) for selecting and arranging portions of stone carving from the ruins of the Kabara Deora, an ancient temple at Kishen Bilas, Kotah State, Rs. 1,543. Colonel Bayley reports that the latter is a beautiful specimen of ancient stone carving;

- (iv) for repairing the ancient Baradari at Rangpur Kotah, Rs. 756; and
- (v) for removing rubbish and jungle from the old temple and ruins at Kishen Bilas, Kotah, and for sorting the carvings, Rs. 584.

PUNJAB.

37. The grant of Rs. 19,892 made by the Supreme Government was distributed as follows by the Local Government:—

	R
(i) Special repairs to Jahangir's Tomb, on an estimate for Rs. 41,614	6,000
(ii) Experimental relaying of Jahangir's Tomb terrace, on an estimate for Rs. 65,100	2,000
(iii) Special repairs, Shalimar Gardens, on an estimate for Rs. 12,546	4,000
(iv) Removal of Railway buildings at Jahangir's Tomb	392
(v) Repairs to the mosaics in the Dewan-i-Am, Delhi, on an estimate for Rs. 10,815	2,916
(vi) Repairs to the Kila Kona Mosque at Delhi	3,500
(vii) Approaches, Nur Mahal Sarai	870
Parapet, ditto	214
TOTAL	19,892

Besides this a Provincial grant of Rs. 11,000 was distributed as follows:—

	R
(viii) Revised estimate for repairs to upper terrace of Jahangir's Tomb, Rs. 23,108 (ordered to be closed)	700
(ix) Nakodar Tomb, on an estimate for Rs. 7,324	5,816
(x) Petty repairs to historical buildings, on an estimate for Rs. 11,719	1,000
(xi) Humayun's Tomb, Delhi, on an estimate for Rs. 2,024	784
(xii) Office and petty establishment	2,700
TOTAL	11,000

And a grant of Rs. 4,000 for annual repairs, distributed as follows —

	R
(xiii) Repairs to Shahlimar Gardens . . .	794
(xiv) Do. to buildings, Lahore Fort. . .	800
(xv) Do. to do. in and around Delhi . . .	1,906
(xvi) Battle monument at Ferozpur . . .	300
(xvii) Hiran Minar, Tank and Baradari, Ferozpur . . .	200
TOTAL . . .	4,000

Jahangir's
Tomb.

38. As regards the repairs at Jahangir's Tomb, the colonnade of the main building has had the tile Dado partially freed of whitewash, and part of the colonnade marble floor relaid. Portions of the marble terrace covering the whole building have been relaid; but the great expense of the latter arrests progress. Part of the coloured decoration in the main corridor leading to the tomb has been renovated. The various gateways of the tomb enclosures have been freed from the partitions, doors, and windows used for their conversion into dwellings (see Appendix J).

Shahlimar
Gardens.

39. The work at the Shahlimar Gardens consists of masonry repairs to portions of the central tank and garden walls, repairs to water channels, enclosure walls, and corner kiosques (see Appendix K).

Fort, &c., at
Lahore.

40. Repairs to buildings at the Fort include those to the Moti Masjid (in use as a treasury), clearing out some upper chambers of the Shish Mahal, repairs to the Shish Mosaic and marble Dado, repairs to the floor of the Huzuri Bagh pavilion, cleaning interior marble-work and carved door of Ranjit Singh's Tomb, and repairs to the coloured tile-work of the north wall of the Fort (see Appendix L).

Nurmahal.

41. The gateway of the sarai built by Jahangir at Nurmahal had been renovated last year, but the approach road has this year been improved and the parapet wall of the gate repaired (see Appendix N).

Nakodar
Tombs.

42. I have not been able to visit Nakodar since the repairs to the Tombs of Muhammad Mumin and Haji Jamal have been completed, but I was present with Mr. Harrington when the various works were decided on. All temporary or disfiguring additions were to be removed, the main object being to preserve what remains of the beautiful tile decorations and paintings. Experiments have been made to reproduce both forms of ornament; but with what success I am not in a position to judge.

43. Lieutenant Abbott, R.E., prepared an estimate for renovating the roof and ceiling of the Dewan-i-Khas in the Delhi Fort, amounting to Rs. 7,231; but as he contemplated dismantling the old roof and ceiling and substituting entirely new work, I felt obliged to recommend that the old ceiling should be left intact. I consider that repairs should leave all the old work intact; any other proceeding is vandalistic.

Dewan-i-Khas,
Delhi.

44. An estimate for restoring the singular black marble mosaic at the back of the Dewan-i-Am in the Delhi Fort was drawn up by Lieutenant Abbott, amounting to Rs. 10,815. This received the sanction of the Punjab Government in September, and work to the extent of Rs. 2,916 has been done (see Appendix P). I visited Delhi in March last, and was quite satisfied with those repairs.

Dewan-i-Am,
Delhi.

45. An estimate for special repairs to the Kila Kona Mosque in Purana Kila, Delhi, amounting to Rs. 4,864, was sanctioned in November 1883. The whitewash of the interior has been removed, but it should have been done without scraping the marble and stone. The mosaic work has been well repaired. The security of the structure requires attending to and insuring.

Kila Kona
Mosque.

46. Repairs to buildings in and around Delhi are as follows¹ :—

Repairs to
buildings in
and around
Delhi.

- (a) Red sandstone flooring to the pavilion known as "Bhadon," in the Delhi Fort.
- (b) Tomb of Imam Zamin at the Kutub. Renewal of eaves and chujjas, red sandstone flooring, and partial removal of whitewash.
- (c) Gateway of Ala-ud-din at the Kutub. Renewal of broken points of the cusped archways, repairs to red sandstone walls, repairs to the floor in concrete.
- (d) Saldar Jang's Tomb. Petty mason's work and cleaning.
- (e) Tomb and mosque known as Jamali Kamali at the Kutub. Red and white stone flooring, cleaning, and petty mason's work.
- (f) Kutub-ul-Islam Mosque. Partial cleaning of the columns.
- (g) Wire fence to enclose the group of buildings at the Kutub (see Appendix O).
- (h) Repairs to the floor and screens in the small tomb in the grounds of Humayun's Tomb, and wire

¹ See Appendix O.

fencing round the tomb known as that of the Barber.

- (1) Provision of watchmen to the Delhi Mutiny Monument on the ridge.

Lall Bangla,
Delhi.

47. The Canal Department at Delhi has for some time been desirous of converting some tombs of modern Mogul architecture, known as the Lall Bangla, into canal rest-houses. I represented that they might be repaired and utilised if a guarantee could be obtained not to disfigure or alter the buildings, which are interesting specimens of the 18th century. Sanction to their transfer to the Irrigation Engineers has been withheld by the Punjab Government.

Yusufzai.

48. The excavations conducted by me this year in Yusufzai have resulted in the discovery of a large number of sculptures from various sites on the frontiers of Swat and Buner. I was engaged in the district from the 29th October to the 12th December. Government determined that the work must be done in communication with the Director General of the Archaeological Survey, and I therefore reserve a detailed report for the volume which he and I have in preparation on the "Buddhist Sculptures of Gandhara."¹ After leaving Mardan in December, I spent ten days at Lahore in arranging the sculptures discovered under my direction in the same district during the cold season of 1882-83 (see pages cxiv-cxxxviii, Report, 1882-83), and these, together with the finds of this year, are now collected together in the building known as the Chauburji.² There are altogether 227 boxes in which the carvings can be exhibited until more finished cases are made. The subjects are, as far as possible, grouped according to their class, figures, panels, friezes, &c., the broken pieces being pieced together so as to appear intelligible. Twelve sites were examined during the two seasons, the sculptures from each being kept together; of these Lahore retains 5, and the remainder are presented to the following museums by the Punjab Government:—

Imperial Museum, Calcutta	2 groups
Victoria and Albert Museum, Bombay	2
Central Museum, Madras	2
Museum at Rangoon	1

They have all been photographed; some of them, reproduced by heliogravure, are published (see Appendix I). I

¹ See Appendix T.

² See Appendix S.

also had some of the most remarkable sculptures in the Lahore Museum photographed by my Assistant, Mr. Supervisor Fluke. A selection of these, together with the photographs General Cunningham has of the results of his earlier explorations, will be utilised in the volume alluded to.

NORTH-WESTERN PROVINCES AND OUDH.

49. The Government of the North-Western Provinces and Oudh referred to me in July 1883, on the subject of Imperial assistance for the construction of a visitors' bungalow at Fatehpur Sikri, estimated to cost Rs23,117. In reply I was directed by the Government of India to state that funds for such a purpose were not available. It is, however, most desirable that suitable accommodation be found, as three of the palace buildings continue to be used by visitors.

Fatehpur Sikri
Bengaloe.

50. In August the Lieutenant-Governor addressed the Inspector-General of Military Works on the subject of the early relinquishment of the Jahangir Mahal Pavilion in the Agra Fort, in view to its repair, and said he would be glad if the construction of other quarters for the Provost Sergeant could be expedited (see page cxli, Report for 1882-83).

Jahangir
Mahal Pavi-
lion, Agra
Fort.

51. The Executive Engineer, Archaeological Division, North-Western Provinces and Oudh, sent me an estimate in July for repairing two raised sandstone causeways, which intersect the garden of Akbar's Tomb, at a cost of Rs6,817, and in forwarding the papers to the Local Government I remarked that the original geometric laying out of the garden had to a great extent disappeared, and what had been done of late years was merely to redeem the grounds from wild jungle; that if the two causeways were to be restored the others in the garden should be also put in repair, but if not, it seemed to me sufficient to simply bank up and turf the causeways to the north, west and east, but to repair the one to the south which serves as an approach for visitors.

Sikandra
grounds.

52. The damage done by visitors to the mosaics in the Agra Fort Palaces led me to recommend the provision of iron gates at the various points of ingress (see page cxli of the Report for 1882-83), and Mr. Heath's estimate amounting to Rs452 was sanctioned in November.

Casualty of
the Agra Fort
Palaces.

53. The suggestions in regard to the Sarnath Tope made at page cxlv of the Report for 1882-83 led to a revision of the original estimate (Rs7,784) and its reduction to Rs5,039, which amount was sanctioned.

Sarnath Tope,
Benares.

54. At page cxli of the Report for 1882-83 I recorded a recommendation to repair the façade of the Ummer Singh

Ummer Singh
Gate, Agra
Fort.

Gate in the Agra Fort. Mr. Heath's estimate for renovating the inlaid work and protecting the surface of coloured tiles with silica, amounting to ₹667, was recommended.

Khas Mahal
and Saman
Burj, Agra
Fort.

55. In September I advised the Local Government to sanction Mr. Heath's estimate, amounting to ₹3,910, for repairs to the enclosure walls of the Khas Mahal and Saman Burj in the Agra Fort.

Chini-ka-Roja,
Agra.

56. In October Mr. Heath sent me an estimate for repairs to the Chini-ka-Roja (a tile-covered tomb on the north-east bank of the Jamma near the Rambagh), amounting to ₹1,257; and in recommending its sanction, I pointed out that the tile-work which had become black from damp should be cleaned, also that the interior fresco paintings should be revived, and a copy of the band of inscription encircling the interior should be sent to General Cunningham.

Diwan-i-Khas
terrace, Agra
Fort.

57. In December 1883 I recommended an estimate amounting to ₹1,870 for repairing the terrace and marble railing in front of the Diwan-i-Khas in the Agra Fort.

Protection
from lightning.

58. Estimates for providing the following buildings with lightning-conductors have been recommended:—

i.—Moti Masjid, Agra Fort.

ii.—Akbar's Tomb, Sikandra.

iii.—Great Mosque, Fatehpur Sikri.

Mint
buildings,
Fatehpur
Sikri.

59. Last year, I submitted various recommendations for buildings at Fatehpur Sikri (see page cxlii, Report, 1882-83); and Mr. Heath has prepared an estimate amounting to ₹1,087 for clearing the old mint buildings of debris and for propping some of the domed chambers. I pointed out to the Local Government that this sum seemed a good deal to spend on so plain a building, and that others of greater importance should be dealt with first—such as the so-called Haraoti-ka-Roja Pavilion and the house of Nawab Islam Khan.

Painted
decorations
at Sikandra.

60. In a note on Akbar's Tomb at Sikandra (see page cxli, Report, 1882-83) allusion is made to the painted walls of the vestibule in front of the passage leading down to the actual tomb of Akbar. Ishmail Khan of Delhi has been employed to revive a portion, and the work is certainly very effective and handsome. I think the whole should be gradually restored, as the ornamentation is both rich and varied.

Removal of
whitewash
from all
buildings.

61. So much has been done to the Agra buildings that any shortcomings stand out in great contrast. The appearance of whitewash is particularly offensive. It occurs in Jahangir's Palace in the Agra Fort, where the removal is only

partial and done by *scraping*. It also appears in parts of Akbar's Tomb and the entrance gate, and in many other buildings. I think that a gang of workmen should be continually employed in removing whitewash from *bond fide* masonry or painted walls, and be trained to do so without injury to the surfaces beneath. The only way is to soften the lime with soap or acid and water, and to remove it carefully with modelling tools and brushes, using a syringe or garden pump to clean the surface. The cost is not great, but the effect is, and the process sometimes results in discoveries.

62. As Mr. Heath has unusual facilities at Agra and other Inscriptions. places where work is in progress, I beg to suggest that he be instructed to copy all inscriptions on buildings and to send them to the Director General of the Archaeological Survey.

63. I visited Agra on the 18th-19th February. The Chini- Visit to Agra. ka-Roja should be more accessible to visitors and have a good road up to it. The fresco paintings in the buildings overlooking the river at Itmad-ud-Dowlah's tomb (see Appendix R) have been freed of whitewash, but damage done by scraping. The paintings in the lower part of the tomb building are very handsome and should be cleaned and revived. The Somnath Gates in the Agra Fort have been cleaned. Mr. Heath states them to be of sandalwood. I think they ought to be in a glazed case in a position where they can be inspected both back and front. This is not possible where they now are. Some marble columns, brackets, and lintels of mosaic similar to that in the Saman Burj were discovered in digging foundations near the Ummer Singh Gate in the Agra Fort. I think they should be set up. The ceiling of the Diwan-i-Khas with marble is complete and satisfactory. Repairs to the Saman Burj and Khas mahal are still in progress. I visited the Fatehpur-ki-Masjid near the Taj with Mr. Heath, and suggested how for a small sum he could secure the building from ruin, by water-tighting the roof and domes, and by filling in gaps in the masonry walls (see para. 5, page ccxii, Report, 1881-82).

64. When at Allahabad in February, I took the opportunity of seeing the Commissary of Ordnance, Major Lamb, R.A., Allahabad Fort. to ascertain whether it is necessary to periodically white and colour-wash the interior of Akbar's Palace, and he said he would make no difficulties if the Executive Engineer was directed to clean the red sandstone columns. Indeed, some of them are *coloured red*, and cleaning them could have no effect on the light of the interior.

CENTRAL PROVINCES.

Mandhatta.

65. In October 1883 I submitted my survey of the Island of Mandhatta to the Chief Commissioner of the Central Provinces.

A survey of the eastern portion of the island, and plan, section, and details of the Siddheswar Temple, were accompanied by the following recommendations:—

"The plan of the structure is *unique*, being a *central sanctuary surrounded on all four sides by porches*. The walls of the main part of the building, which is a square of 37 feet, are very massive and probably supported a lofty *sikra*, or tower, such as most temples possess. Each porch was composed of fourteen columns, but there is no evidence as to whether anything existed above the present flat roof. The great feature of the building is its plinth, with the bas-relief of large sculptured elephants. The whole is extremely ruined, and Mr. Grant conjectures that the temple was overthrown by Ala-ud-din, who passed through the country in A.D. 1295.

"The plan shows what parts of the structure are standing, but until the debris is cleared away, no correct perception can be had of what is best for the preservation of the remains. The temple was domed in by Rao Daolat Singh some 45 years ago, and a Lingam now exists in it, but whether the dedication was originally to Siva can be best ascertained by a careful examination of all the fragments which are scattered around. An inscription or some sculptures may come to light, but as the architecture is Jain in style and an elephant is the symbol of the second Jain hierarch 'Ajitanatha,' it may possibly be discovered that the dedication was originally Jain and not Hindu at all.

"I strongly recommend that the building be cleared of all debris, that all portions of columns or carvings be carefully collected, and that they, together with the elephant plinth, be as far as possible got back into position. Restoration in a case of this sort is out of the question, but what exists should be preserved and secured *in situ*.

"If the preliminary clearing of the site of jungle and ruined masses, and collection of all carved fragments can be arranged for, some better or more suitable remedies may become evident. Notes on the plan of the temple indicate generally the condition of the structure, and where many of its component parts may be found."

I suggested in a letter that an engineer should be sent to carry out the preliminary measures, and offered to contribute towards the cost, but have not heard of anything having been done.

BURMAH, HAIDERABAD, ASSAM, AND MAISUR.

Discoveries
in Assam.

66. In regard to Burmah, Haiderabad, and Maisur, I have nothing new to report. Some remains recently discovered in Assam have been added to the list of buildings in Appendix A.

THE PRACTICAL USE OF INDIAN ARCHÆOLOGY.

67. I would venture to describe archæology as the discovery, elucidation, and preservation of historical records and monumental remains. The study of history is part of the national education, and to elucidate history is one of the uses of archæology. But archæology has other uses bearing on the architecture and art of a nation.

68. Each part of India has its own styles exhibited in the temples and dwellings of the past, and it is only right that these styles should reflect themselves in the native architecture of the present day.

That such is not the case is greatly due to our own pre-occupation in the government of a new country, also to neglect and destruction in the days of conquest and mutiny.

69. Natives of India, for centuries the most conservative of people, are now aspiring to adopt English customs, whilst neglecting many of their own. I remember Amravati Sashya Sastri, C.S.I., telling me at Kombaconum in February 1881 that a temple architect in Madras is scarcely to be found. The people replaster and repaint their own fanes, but when it comes to building a new one, those who in old days would have produced a suitable plan are either in the service of our Government as engineering draftsmen or busy misrepresenting Gothic or Renaissance. A rich Seth of Muttra wanted some years ago to build a temple, and although Muttra was in ancient times the centre of Hindu architecture he had to send to Madras for a plan, the result being an inferior interpretation of Dravidian art. The Maharaja of Punna has built himself in Bandelkhand a temple like St. Pancras Church in London, and Scindiah and Holkar have a hankering for Indo-Italian Palaces.

70. Government provides for the education of natives in languages intimately connected with their various faiths, but it holds itself neutral in matters of religion. Its province is clearly not to encourage temple or mosque building, but when they are to be built it decides to provide for public *health* and *safety* before the design can be carried out. Why should not public *taste* be considered as well? Natives are often indifferent to sanitation or stability in their dwellings, but the poorest peasant likes a coloured pattern in his mud shanty.

71. As regards secular architecture, there is much in Bombay, Madras, and Calcutta to gratify the architectural tastes of Europeans, but no extensive encouragement has been given to native architecture.

72. Something should be done, as the styles of public buildings at the presidency and other large towns have thrown the native mind into a state of chaos, and produced a mixed architecture over India, which every cultivated taste must regret.

73. The remedy is to let natives learn better. But they cannot be wandering up and down India to study the best buildings, and if they could, only one in a thousand would be able to draw them. To learn a language a grammar is required; to study architecture, a grammar of construction and ornament.

74. Without entering into the question of methods of teaching or classes to be taught, I submit that an accurate representation of Indian architecture is wanted for architectural students.

75. Similarly, as regards industrial art, a grammar of ornament should be compiled applicable to decoration of all kinds and intelligible in respect of scale and colour.

76. When invited in 1867 to offer suggestions for collecting information about the ancient architecture of India, I advocated its representation by photographs, drawings, plans, casts and written descriptions, pointing out how such means of educating natives might benefit their modern art.

77. In a note published in May 1879 (see Appendix G., First Annual Report, 1881-82) on the Industrial Arts in India, I endeavoured to direct attention to the use of ample illustrative material, such as architectural flat and carved ornament and examples of industrial art.

78. I have been permitted to publish some experimental architectural plates which are described in the appendices of this report and give an idea of the class of illustration that I think would be of practical use.¹

79. These are but a portion of what is necessary to adequately represent Indian architecture and art. It would be necessary to complete the work, as I commenced it, under the Supreme Government; otherwise there would be sacrifices to uniformity, unnecessary repetition, as well as additional cost.

H. H. COLE, Major, R.E.,
Curator of Ancient Monuments in India.

¹ At the request of Government I have given a proposed distribution list in Appendix Y. Twenty-two sets have been subscribed for out of the 100 published, and more subscribers are expected. I think that single copies of the Plates should be available to give or sell to artisans of this country. The average cost for a new edition is—

Engravings (single Plates)	10	} For one rupee.
Heliogravures	8	
Chromolithographs (double Plates)	1	
Ditto (single Plates)	2	

Appendix A.

Lists of some Principal and other Native Architectural Buildings in Bengal, N.-W. Provinces and Oudh, Punjab, Kashmir, Rajputana, Central India, Central Provinces, Haiderabad, Maisur, Burma, Madras, and Bombay. Revised, added to, and classified, according to Resolution of the Government of India, Home Department, No. 1053, dated 26th November 1883, as under—

1. Those monuments which from their present condition and Historical or Archaeological value ought to be maintained in permanent good repair.
2. Those monuments which it is now only possible or desirable to save from further decay, by such minor measures as the eradication of vegetation, the exclusion of water from the walls, and the like.
- (1) Those monuments which from their advanced stage of decay or comparative unimportance it is impossible or unnecessary to preserve.
- (2) and (3) b. Those of cost of private individuals.

Bengal.

Some Principal Ancient and other Native Architectural Buildings in the Lower Provinces of Bengal.

Class.	Name of building or group of buildings.	General character.	Condition.	Preservation.	Restoration.	Photographs.	Drawings or plans.
HERDWAN DIVISION.							
<i>In the official list some 14 objects of interest are described.</i>							
11 a	Tomb of Bahram at Burdwan. Shri Acharya, the first husband of Nur Jahan, said to be buried here.	Built 600 years ago; the tomb of a Mahomedan post-Babbar.	Condition desirable.	Said to be fair.	Special investigation necessary.	None.	None.
11 a	Bahroopur Temples, in the Bankura District.	Brick and terracotta buildings; history unknown.	Ditto	Fair, but overgrown with trees.		Mr. Beglar took some for the Archaeological Department.	None.
11 a	The so-called "Five Jewelled" Temple of Gaur, in the Midnapore District.	About 722 years old; said to be very ornamental.	Ditto	Overgrown with vegetation.		None.	None.

Bengal—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
BURDWAN DIVISION—contd.							
H 2.	Kheharagarh, in the Midnapur District.	A fort dating 1490 A.D., with two circular bastions of a square plan, and his side on limestone.	Custody desirable.	In ruins.	Special investigation necessary.	None.	None.
I 1.	Minarath at Pandouah, in the Hooghly District.	A tower, probably of victory, used as a minaret; an interesting (main) date liberally available.	Idem.	—		None.	None.
H 1.	Square Mosque at Pandouah.	About 1427 A.D., and of brick.	—	—		None.	None.
PRESIDENCY DIVISION.							
<i>In the above list some particulars of interest are described.</i>							
H 1.	Hindia Temple, Jarrae Dool, at Diamond Harbour, 24 Pargannas.	A specimen of very fine brick-work; the bricks said to be carved, probably torse-cuts; date 971 A.D.	Custody desirable.	—	Special investigation necessary.	None.	None.
H 1.	The Sri Guntia, or Sixty Domes, at Bagurhat, in the Jessore District.	A massive brick building, date about 1438 A.D., built by Khanda Ali.	The temple is kept clean by an old man, who gets money from pilgrims.	The masonry in fair order; repairs wanted on the surface; the roof is covered with jungle.		None.	None.
H 1.	Pir Ali's Tomb at Bagurhat, in the Jessore District.	Date about 1498 A.D.	In charge of two fakirs, who hold 500 bigas of land for the service of the place under a very ancient grant.	Repairs wanted.		None.	None.
H 1.	Temple of Krishna at Muhannipur, in the Jessore District.	An elaborate building with terracotta and terra-cotta ornament; date 1793.	Custody probably desirable.	Signs of decay are showing.		None.	None.

11b	Makbarah of Mughal Kuli Khan, the founder of Mirshadabad.	A building of good proportions erected in the lifetime of Mirshad Kuli Khan (who reigned 1702-1712) out of materials of Hindu temples destroyed for the purpose.	Supposed to be looked after by the Nawab Nazim.	None	None.
RAISHAHYE AND COCH BEHAR DIVISIONS.					
<i>In the official list none of objects of interest are described.</i>					
11a	The Hoddal Pillar, in the Dinanagar District.	A relic of the Pal Kings.	Closely desirable.	The pillar is still standing.	None.
11a	Two Muhammadan Structures at Dehlok, in the Dinanagar District.	The report calls Dehlok the first Muhammadan capital of Bengal; very early inscription of Kalidasa Shuk at one shrine.	Ditto	Deserves to be preserved.	None.
11a	Muhammadan Tomb at Harnabhad, called Bazar-saidin, in the Dinanagar District.	A mosque close to the tomb, in fair preservation; there are numbers of Hindu carved pillars and stones about; signs of Buddhist work in the angles of the tomb.	Ditto	Much neglected.	None.
11a	Temple of Gopal at Gopalpur, in the Dinanagar District.	Temple dating from 1743 A.D., with curious brick and terracotta ornament.	Ditto	Surrounded by jungle and falling into decay.	None. See Ferguson's India as an Architectural tour, page 467.
11b	Temple at Katuragar, 12 miles from Dinanagar.	Finished in 1722; a brick building covered with terracotta.	Ditto	Preservation desirable; is said to be kept in repair by the family of the late Raja of the Nagpur.	Details would be valuable. See Ferguson's India as an Architectural tour, page 467.
11a	Temple of Siva at Jalpur, in the Jalpaiguri District.	The most conspicuous ruin in the district; built of very durable brick; began 250 years ago.	Ditto	Fair.	None.

Special investigation necessary.

Bengal—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Dacca Division.							
<i>In the official list some 35 objects of interest are described.</i>							
Ia	So-called Tomb of Ghias-ud-din at Sonargaon, in the Dacca District.	The masonry beautifully carved.	Custody necessary.	The report says it might be easily repaired.		None.	None.
IIa	Ghazidulah's Mosque at Sonargaon, in the Dacca District.	A modern masonry, 1768 A.D., with minarets of glazed pottery.	None.	.....		None.	None.
IIa	Old Mosque at Gaddi at Sonargaon, in the Dacca District.	Dair (1519 A.D.) of red brick with carved stone-work inside and carved brick (terra-cotta ?) over modern building done by.	Twenty-five years ago used for wood-sheds, but now reclaimed for a more modern building done by.	Threatened with ruin.	Special investigation necessary.	None.	None.
BEHALPUR DIVISION.							
<i>In the official list some 55 objects of interest are described.</i>							
IIa	The Krishna Masjid, or Golden Mosque, at Gaur, Madhab District.	A stone building, 375 years old; built in the reign of Sultan Hussein Shah, King of Gaur.	Custody necessary.	Fair preservation.		None known.	See Ravenshaw's Plans by Cunningham Vol. XV, plate XIX.
IIa	Mosque called the Nadim Masjid at Gaur.	An interesting brick building, about 200 years old; the brick-work is said to be carved, but may be in reality terra-cotta or luted "moulded" bricks.	Not known; worthy of custody.	Worthy of being kept entire.	The expediency of restoration requires investigation.	See Ferguson.	See Ravenshaw's Plans by Cunningham Vol. XV, plate XIX.
Ia	Minar at Gaur.	According to Ferguson, a pillar of Victory; date 1200-1215 A.D.	Custody desirable.	Wants clearing of vegetation or will tumble down.	.....	None known.	See Ravenshaw's Plans by Cunningham Vol. XV, plate XV.
IIa	The Golden Mosque at Gaur.	Remains of a fine stone building; 354 years old.	None.	Preservation seems desirable.	.....	None known.	See Ravenshaw's Plans by Cunningham Vol. XV, plate XV.

11a	Kutub Shah's Grave-yard at Purnah or Purnah, in the Malda District.	An enclosure containing many tombs and Kutub's dwelling house, in which are coloured tiles.	The place is held sacred still.	—	—	Ditto.	None known.
1a	The Ashraf Masjid and Tomb of Shamsa at Purnah, in Hazrat Poddah, Malda.	Erected A.D. 1580; much decorated with tiles and carvings in stone; is the finest and largest example of Bengali-Pathan.	Carefully desirable.	Ruined.	—	See Ferguson, Plan by Cunningham.	See Ferguson, Plan by Cunningham.
11a	Mausoleum of Jalal-uddin Muhammad at Hazrat Poddah.	A fine example of the Bengal-Pathan.	Ditto.	—	—	None.	Plan by Cunningham.
1a	Jami Masjid at Hattur, a mile from Rajmahal, in the Sonahat Perganah.	A beautiful building, built in A.D. 1521 by Mur Shih, Akbar's Rajput General.	Ditto.	In bad condition.	—	None known.	None known.

CHITTAGONG DIVISION.

In the official list some 15 objects of interest are described. No building which appears of special interest.

PATNA DIVISION.

In the official list some 15 objects of interest are described. Existing have been made.

11a	Nalanda Monasteries at Baiguan, in the Patna District.	Buddhist ruins, full of interesting many sculptures of great beauty.	Existing have been made.	Ruined.	Impossible.	None.	A map of Nalanda in Cunningham, Vol. I, page 41. See Cunningham, Vol. I, page 41.
11a	Ruins of Rajgir and Girya in Behar sub-division, in the Patna District. Sculptures of all kinds (Brahminical and Buddhist) collected by Mr. Boudley at Behar.	Buddhist ruins at Rajgir, the ancient capital of Magadha. Some of them are most valuable, but out of place where they are, and should be sent to the Imperial Museum, Calcutta.	Carefully desirable.	Ditto.	Ditto.	None.	Photographs by Mr. Boudley and Mr. Boudley.
1a	Great Buddhist Temple at Buddha Cye, in the Gaya District.	This is a fine and most interesting brick building; names of carved stones to be found around the ruins; date first century B.C.	Carefully desirable.	Has been completely destroyed at a cost of some Rs. 50,000, and is completed.	—	Has been photographed by Mr. Boudley, Executive Engineer.	See Cunningham, Vol. I, pages 1-12, and Vol. II, (class XXV—XXVII). Ferguson, and Lapresse, India, Vol. I, page 12.
11a	Ruins at Purnah and Karkhah East of Gaya, 14-17 miles.	Buddhist remains.	—	Ruined.	—	—	Can only be seen, Vol. I, page 12.

Bengal—contd.
Principal Ancient and Architectural Buildings, Etc.—contd.

Class	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
PATNA DIVISION—contd.							
I a.	Buddhist Temples and Caves in the Barabar Hills in Jalpaiguri subdivision, Gya District.	The caves are carved in the granite rock, and vary in age from 200 to 250 B.C.; among them, the celebrated "Kishan Chupat," the "Sudama," and "Lomas Rishi" caves.	—	Good	—	—	See Ferguson and Cunningham, Vol. I, page 46.
II a.	Buddhist remains at Dharnid, north of the Barabar Hills, in the Gya District.	Extensive mounds about the present village; also a small temple with a standing figure of Bodhisattva.	Custody desirable	Ruins	—	None known of	Plans by Cunningham. See Vol. XVI, plates XI to XIII. See Cunningham, Vol. XVI, plate XXVIII.
II a.	Remains at Koneh, in the Gya District.	Mausoleum and Buddhist figures situated about a large temple with beautiful sculptured bric-a-brac.	Ditto	The temple suffers year by year from ruin, and will soon be a mass of rubbish if nothing is done.	—	Ditto	See Cunningham, Vol. XVI, plate XXVIII.
I d.	Tomb of Hussain Khan, father of Shir Shah.	An octagonal stone building of considerable merit.	It is custody	Requires small repairs.	—	Has been photographed.	—
I a.	Shir Shah's Tomb at Sasaram, in the Shahabad District.	A fine old Pathan tomb, about 1550 A.D. One of the finest specimens of Pathan art in Bengal.	Ditto	Repairs are in progress under Mr. Beglar.	—	Has been photographed by Mr. Beglar, Executive Engineer.	See Ferguson, Cunningham, Vol. XI, plate XXXIX.
II a.	Ruin and Buildings at Rohan Fort, in the Shahabad District.	Shir Shah captured this fortress in 1550 A.D.; Man Singh, Viceroy of Bengal, started all the buildings now existing in A.D. 1634.	Ditto	Ruins	Mr. Beglar has prepared a rough estimate for repairs.	None known of	None known of.
I a.	Shir Singh's Lat, an Edict Pillar of Aokha near Lauriya, 18 miles south-west of Muzaffarpur.	The pillar is a monolith with a carved lion capital; height above ground about 30 feet; date about 150 B.C.	Since 1793 Englishmen have cut their names on the pillar; it is in the courtyard of a Brahman's house.	Good	—	Photographed by Mr. Garrick. See Cunningham, Vol. XVI, plate XXVII.	See Ferguson, Cunningham, and Kitce.

1a	Buddhist Monasteries and Edicts Pillars in the district of Champaran.	.....	Custody desirable.	Reins	.....	Ditto	See Ferguson and Cunningham Bihar, Vol. XV.
ORISSA DIVISION.							
<i>In the official list some 23 objects of interest are described.</i>							
11a	Temple at Chandrapur.	A building with beautifully carved sculptings and sculptured panels.	.....	.....	.....	Photograph by Mr. Beglar.	Plan by Mr. Beglar.
11a	Hindu Pillar at Chandrapur, Jajpur, in the Cuttack Dis- trict.	A stone column about 22 feet high, supported originally by Sarcopa? which has half a mile off.	Custody desirable.	Fair	The question of how far restora- tion is possible or expedient re- quires special investigation.	Has been photo- graphed. See Ferguson.	Sketch by Kila- nec.
11a	Buddhist remains in the Abir Hills, Jajpur, Cuttack Dis- trict.	Have been imperfectly explo- red.	.....	.....	.....	.....	.....
11b	Temple of Jagannath at Puri, in the Puri District.	Built 1100 A.D.	Used for worship, &c.	Fair	The question of how far restoration is pos- sible or expedient requires special in- vestigation.	Has been photo- graphed. See Ferguson.	See Ferguson and Bahu Rajen- dra Lal Mitra Mitra.
11a	Grottoes of Udaypur and Khundagol, Cuttack.	.....	.....	.....	.....	.....	.....
11b	Great Temple at Bhuvanes- war, in the Puri District.	Date about 612 A.D.; a very elaborate Hindu temple.	Used for worship	Fair	.....	Has been photo- graphed.	See Bahu Rajen- dra Lal Mit- ra's book.
1a	The Black Pagoda at Kana- tal, in the Puri District.	Date about 871 A.D. (there are various theories as to date); a very elaborately carved Hindu building.	Custody seems des- irable.	Fair	.....	Ditto	See Bahu Rajen- dra Lal Mit- ra's descrip- tion in Orissa.
1a	Rock of Anantashila near Bha- nupur, with Akshita in- scription.	.....	.....	.....	.....	.....	.....

Bengal—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Class	Name of building or group of buildings.	General characters.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
CHOTA NAGPORE DIVISION.							
<i>In the official list some 11 objects of interest are described.</i>							
II a	Temples at Barnkar	Small square structures with pillars. The pillars and bases are very curiously treated with twisted pillars ending in small capitals with Hindu Deities.	.....	.....	.....	Photographed by Mr. Baglar.	See Cunningham, Vol. VIII, plates VI, XIV, XV.
II a	Beck and Terra-Cotta Temples at Para, in the Mandla District.	Sum of the brick work is very good.	.....	.....	.....	Mr. Baglar has taken photos.	None.
II a	Fort and Palace of the Eschote Rajah at Pachet, Mandla.	Ruins, temples, towers, &c. of Hindu stone and terra-cotta work.	Apparently none.	.....	.....	None.	None.
II a	Jain Temples at Tulasy, Mandla.	Stone temples, with elaborate carvings.	.....	.....	.....	None.	None.
II b	Jain Temples at Parimath, Hazaribagh District.	A place of Jain Pilgrimage.	.....	.....	.....	.....	See Cunningham.

N.-W. P. and Oudh.

Some Principal Ancient and other Native Architectural Buildings in the North-Western Provinces and Oudh.

Class	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
<i>In an official list of 1875, 137 objects of interest are mentioned.</i>							
I a	A stone bearing one of Ashoka's inscriptions at Haurpur, near Kulu, Dehra Dun District.	Is in a good state of preservation; but the inscription is somewhat worn by age.	.....	.....	.....	.....	See Cunningham's Corpus Inscriptions and Monuments, Vol. I, Archaeological Reports.

11b	Large Figure of Buddha and Lion at Pindhat, Manipuri District.	Is an object of devotion; preserved by a Hindu Temple.	.....	.....	.....	.....	Drawings by Cunningham, see <i>Archæological Reports</i> , Vol. I, page 271a.
1a	Some Elephant and Capital at Saubla, Ebad District.	The capital of one of Asoka's Edict pillars, 250 B.C.	.....	.....	.....	.....	.....
11a	A temple at Mahurhal, two miles from Kohra, two marches out of Banda on the road to Maloba.	Consists of three separate shrines arranged round a central one which has an approach or passage. It is of granite very deeply carved.	.....	.....	.....	.....	.....
11a	Remains of the Hindu city of Kanauj; formerly the Hindu capital of Northern India.	The remains of interest are the ruins of the old palace called Bara Mahal; the Hindu pillars of the Jami Masjid; the Hindu pillars of the Masjid of Makhdam Tahsinia; and Hindu statues in the village of Singh Bhaswan. Besides these there are numerous mounds covered with broken bricks, earthenware, &c. A large tower covered with stone sculptures of great beauty; date about 500-600 A.D.	Carefully maintained.	.....	.....	.....	See Cunningham's <i>Archæological Report</i> , Vol. I, page 279.
1a	<i>Buddhist Temple at Sarvath, near Bhatra.</i>	A fine specimen of Ghori Pathan building; A.D. 1222.	Ditto	Repairs are in hand.	.....	Has been photographed.	See Cunningham's <i>Archæological Report</i> , Vol. I, page 279.
1a	Jami Masjid at Badam.	A fine specimen of Ghori Pathan building; A.D. 1222.	Carefully maintained.	Repairs are in hand.	.....	Photographed by Gaudy.	See Cunningham's <i>Archæological Report</i> , Vol. I, page 279.
11a	Idgah at Badam.	This is a structure of some interest; built by Shams-ud-din; 1209 A.D.	In custody	.....	.....	Ditto	Illustrations of the Idgah would be valuable.
11a	Tomb of Channi Khan at Badam.	Highly decorated with brickwork, dating from the time of the Sikander Lodhi.	In custody	.....	.....	Worth photographing.	Illustrations would be valuable.

N.-W. P. and Oudh—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Class.	Name of building or group of buildings.	General character.	Condition.	Preservation.	Restoration.	Photographs.	Drawings or plans.
IIa	Raja's Palace at Bijnagar, in Ghorewal, said to date 1330 A.D.	Is built of stone, parts of which are elaborately carved.	.....	Requires clearing and small repairs.	.....	Worth photographing.	Illustrations would be valuable.
IIa	Converted Temple at Mahabai, dating from the 15th century, called the Chattri Palai.	A stone colonnade of sculptured pillars, rooted over by Arunge-ah to serve as a mosque.	Now in custody of Hindus.	Was repaired in 1870 by Government.	.....	Has been photographed.	.....
IIa	Sculptured figure of Buddha at Pindubut, 3 miles north of Mutabakad, Mainpuri District.	Seated on a throne with lions and elephants at the base and on the sides.	Requires investigation.	.....	.....	.....	.....
Ia	Fuin and other temples at Mahabai, Mainpuri District.	Five massive buildings; 100 to 1500 A.D.	Repairs commenced.	.....	.....	Several photographs taken.	See Cunningham's Reports, Vol. II, page 430; Vol. VII, plate II. See Ferguson.
Ib	Fuin Masjid at Jauhar.	149-53 A.D.; a grand and massive building of the Jaunpur Sultan type.	Being restored. Drawings have been made by Mr. Heath.	.....	.....	Ditto.	See Cunningham's Reports, Vol. II, page 430; Vol. VII, plate II. See Ferguson.
Ib	The Akala Masjid at Jauhar.	Very ornate and beautiful; the finest Jaunpur Sultan building.	.....	.....	.....	Ditto.	See Cunningham's Reports, Vol. II, page 430; Vol. VII, plate II. See Ferguson.
Ib	Zail Darwaza Mosque, Jauhar.	This is the smallest of the mosques in Jaunpur; is massive and in the mixed style.	.....	.....	.....	Ditto.	See Cunningham's Reports, Vol. II, page 430; Vol. VII, plate II. See Ferguson.
Ia	Akbar's Palace at Fatehpur-Sikri near Agra.	A beautiful collection of buildings of a mixed Hindu and Muhammadan style.	Under the Architectural Division, N.-W.-P.	.....	.....	Ditto.	See Cunningham's Reports, Vol. II, page 430; Vol. VII, plate II. See Ferguson.
Ia	Hall in the Palace at Allahabad.	Built in Akbar's time.	Now used as an arsenal.	.....	The removal of which is much desired, but has not been ordered.	.....	See Cunningham's Reports, Vol. II, page 430; Vol. VII, plate II. See Ferguson.
IIa	Fatehpur-ki Masjid near the Taj.	A building of the later Mogul style; in a better condition.	.....	Mr. Heath knows what I think should be done to prevent collapse.	.....	.....	.....
IIa	Monolith at Bith, Ghazipur District.	A sandstone column of the Gupta period with inscriptions.	Should be fenced in.	.....	.....	Photograph taken by Beglar.	.....

Ia	Tomb of Feris Khan, near Agra.	Erected in Akbar's time; very handsome.	Has been cleared and thoroughly repaired.	.....	Has been photographed.	.....
Ia	Hindu Temple at Bindrahar, near Multa.	Erected in 1925-1915 A.D.; a remarkable building, being a mixture of Hindu and Muhammadan art.	Has been restored by Government, is in the custody of Native P. & A., and its integrity should be secured or mal-treatment is inevitable.	.....	Ditto.	See Ferguson and Cole.
IIa	Tomb of Khwaja Aitmar Khan, near Sikandra, Agra.	A good specimen of early seventeenth century Mogul architecture.	Have been cleared of the infidelities and repaired by Mr. Heath.	Has been repaired by Mr. Heath.	Has been photographed.	.....
IIa	Tomb of Sadik Khan and Salabat Khan, near Sikandra, Agra.	Good specimens of the architecture of Shah Jahan's time.	Has been restored; the surrounding walls and gateways are in good condition; repairs are in hand.	.....	Have been photographed.	.....
Ia	Abbas's Tomb at Sikandra.	Very beautiful mausoleum.	Is almost completely ruined. The dome is in ruins. The surrounding gates are in ruins. The whole structure has been completely restored.	.....	.....	See Ferguson.
Ia	Fort at Agra.	Contains fine buildings of Jahangir and Shah Jahan.	All has been restored except the fresco paintings.	.....	Has been photographed.	.....
Ia	Taj Mahal.	A beautiful marble tomb of Shah Jahan and his wife.	.....	.....	Ditto.	See Ferguson.
Ia	Tomb of Inayat-ud-Dowla, at Agra. (See Appendix B.)	Built in the reign of Jahangir A.D. 1605-1611, a beautiful building of marble and mosaic.	.....	.....	Ditto.	.....
IIb	Tomb of Shah Abdul Razak at Jaipur, Mutafar District.	Is a handsome structure, built of stone and brick, and has a coloured tile dome.	.....	.....	.....	.....
Ib	Masjid in the old City of Kooli, Aligarh District.	This mosque was built 140 years ago; it was once stood on an ancient site erected in 1253 A.D., which after the Muslim was pulled down for municipal improvements.	Said in 1868 to be kept in repair by the heirs of Shah Abdul Razak. Under repair by the Muhammadan community, but not well done.	.....	.....	Plans by Cunningham.
Ib	Mosque of Nubia Sahib in the market place, Multa.	Built by Ghulam Nubia, Governor of Multa, 1660 A.D.; a central building with four hundred minarets with coloured tile work.	Worthy of custody and preservation.	.....	.....	.....

Under the Archaeological Department, North-Western Provinces.
 Mr. Heath has prepared drawings.
 See also drawings XI to XXIII, Vol. IV, Archaeological Reports.

N. W. P. and Oudh—*contd.*
Principal Ancient and Architectural Buildings, &c.—*contd.*

Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
1a	Sculptures, mostly Buddhist, in the Museum at Muttra.	Three valuable sculptures should be more accessible for inspection.	.....	Should be removed to the Provincial Museum or to Calcutta.	.....	.....	See Cunningham, <i>ham</i> , pages 244, Vol. I, also plates I to XVI, Vol. III, and Vol. XVII, plates XXX to XXXI.
11b	Temple of Haridwarji at Gonda.	A ruined building of red sandstone, built 250 years ago, by Raja Bhugwan Das of Multan.	Worthy of custody.	Was partly destroyed by Aurangzeb and repaired by the Raja Jas Singh of Jaipur.	.....	.....	.....
11b	Zamindar's House in Luthi, near Shekhpur, Mainpuri District.	Built some 70 years ago; said to be a very remarkable specimen of modern domestic native art.	.....	Used to be repaired by Government before the Mutiny.	.....	.....	.....
11b	Jami Masjid in Pithbha, Bareilly District.	A handsome building, said to be well worth preserving.	.....	Kept in repair by the Maharaja of Benares.	.....	Has been photographed.	.....
11b	The Smaller temple at Ramnagar, in the Benares District.	A handsome temple, begun about 100 years ago, completed by the present Raja of Benares; it covered with handsome bas-reliefs.	Custody desirable.	Much ruined and destroyed.	.....	.....	See Cunningham, <i>ham</i> , Vol. XII, plates III and IV.
11a	Chintka-Ross at Agra.	Of Aurangzeb's time; a mausoleum covered with blue enamel.	.....	.....	.....	.....	See Cunningham, <i>ham</i> , Vol. XII, plates VI and VII.
11b	Jami Masjid at Sambhal about 15 miles south-west of Moradabad.	Of Babur's time.	.....	.....	.....	.....	See Cunningham, <i>ham</i> , Vol. XII, plates VI and VII.
1a	Ancient remains at Indur Khera, Bulandshahr District.	.....	.....	.....	.....	.....	See Cunningham, <i>ham</i> , Vol. XII, plates VI and VII.
1b	Temple of Vishveswar at Benares.	About 150 years old.	In use by the Brahmans.	.....	.....	.....	See Cunningham, <i>ham</i> , Vol. XII, plates VI and VII.
1b	Ghanta Ghat, Benares.	A modern stone building.	In use.	.....	.....	.....	See Cunningham, <i>ham</i> , Vol. XII, plates VI and VII.

1a	Khajuraho Bagh at Allahabad	A garden with the tombs of Khutro, his mother and sister (Uchhaugra's period).	In use as a public garden.	Has been partially repaired by the Allahabad Municipality.	Has been photographed.	—
1a	Hindu carved stones of the Gupta period in the Fort of Gorhwa, 25 miles south-west of Allahabad.	The square pillars forming Toren gateways should be obtained from the Raja of Bara for deposit in the Provincial Museum or sent to Calcutta.	—	—	—	See Vol. III, plates XIX to XXI and Vol. XI, plates V to VI, Vol. XI, Archaeological Reports.
1a	Capital of the Indo-Scythian period formerly at Mathra.	Was removed by Dr. Rhoads to Bombay, and is now in possession of his heir. Should be recovered for the North-Western Provincial Museum.	—	—	—	See Cunningham, Vol. XVII.
1a	Ruins at Kottaganga, near Kasu, Gorakhpur District.	Has a capital and is 26 feet high. The figures which surmounted the pillar are on the ground.	—	—	The figures should be replaced on the top.	—
1a	Ardra Column at Hathia near Zamaiah, Ghazipur District.	A number of carved stones and fragments might be removed to the Provincial Museum or sent to Calcutta.	—	—	Ditto.	—
1a	Ruins at Kapila vatu near Fyzabad.	Buddha's birth-place.	—	—	—	See Cunningham, Vol. XI, plates IX to XII.
1a	Ruins of an ancient City at Bhithon near Palla in Khuri District, Oudh.	This is worth exploring; some pottery, terra-cotta, and sculptures have been found.	—	—	—	See Vol. XI, Archaeological Reports.
1b	Fragment of a Hindu temple at Nawal near the Ganges, Cawnpore District.	General Cunningham found numerous terra-cottas here in 1860.	—	Any existing fragments should be removed to a Museum.	—	See Vol. XI, Archaeological Reports, plates XIV to XVII.
1b	Bhitharjan, six miles south of Cawnpore, Fargans, Sahi, Salimpur.	The one large temple dates 6th or 8th Century, A.D., and is covered with panels of terra-cotta representing Brahminical subjects.	—	Wall north preserved. General Cunningham removed some pieces of terra-cotta. Now in Calcutta Museum.	Has been photographed by Mr. Beglar.	—
1b	Sabat Mahal, 10 miles north of Gonda and 12 miles west of Ballarapur, ancient name of Savant. Vide Gonda of Buddhism.	Remed city, with remains of Buddhist monasteries, temples, and earthen compounds, with brick battlements.	In ruins, covered with jungle.	—	—	See page 295, Vol. I, Archaeological Reports.

Punjab. Some Principal Ancient and other Native Architectural Buildings in the Punjab.

Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
<p>DELHI DISTRICT.—(See Appendix O page CXXXIV.)</p> <p><i>In the official list some of buildings are described.</i></p>							
II a	<i>Ruins at the Kutub, near Delhi.</i> (See Appendix O.)	Historically of the highest interest, being the most important mark of the Muhammadan conquest of India, is situated about 11 miles from Delhi.	It is not known who gave the custody of all buildings is of a systematic character.	<i>The Kutub Minar is fairly preserved; other buildings require attention; and the latter should be more secure, and destructive vegetation kept down.</i>	Repairs about to be undertaken.	Photograph held by Bourne and Shepherd and others. Also see <i>Archives des Indes</i> by H. H. Cole, published by Arnold Society.	See Ferguson and Cunningham, <i>India</i> , pages 112-113, Vol. I, and plates 1 to Vol. IV.
I a	<i>Tomb of Maulvi Tamaki Khan, near Delhi, is the south-east of the Malakfa House at the Kutub.</i>	Decorated in a beautiful and singular way with coloured terra-cotta tiles; date 1335 A.D.	Custody desirable.	<i>The ground has been purchased and the tomb and mosque repaired.</i>	.....	No photograph known to exist.	<i>Drawing made in my office.—H. H. C.</i>
I a & II a	<i>Ruined Tombs, and buildings around Delhi.</i> (See Appendix O.)	Chiefly Pathan and Mogul.	Ditto	<i>Very variable; preservation in many cases most desirable.</i>	.....	Some photographs taken by Bourne and Shepherd.	Many noticed in Ferguson; also see Cunningham, Vol. IV. <i>Many drawings in my office.—H. H. C.</i>
I a	<i>Khan-Khan Mosque in Purana Kila, Delhi.</i>	One of the finest buildings of Shih Shah's line.	.....	<i>Will be repaired; suitable sanctioned.</i>	.....	Has been photographed.	<i>Drawings in my office.</i>
I a	<i>Humayun's Tomb near Delhi.</i>	Early specimen of Mogul architecture, 1554 A.D., in marble and sandstone.	Systematic custody advisable.	<i>Ground has been reserved from cultivators.</i>	.....	Photograph held by Bourne and Shepherd.	<i>Drawings in my office.—H. H. C.</i>
II b	<i>Chauhan Khambha, a tomb 3 miles from Delhi; date 1600 A.D.</i>	A Muhammadan tomb decorated with beautiful cut marble screen-work.	Ditto	<i>In fair order, but some screens mutilated.</i>	Probably desirable.	Ditto.	See Cunningham, Vol. IV. Details of tracery would be valuable.

(b) <i>Tomb Masjid in Delhi, date 1639-55 A.D.</i>	A beautiful Mogol mosque still in use.	In custody of Muhammadan priests.	Slight repairs wanted.	.....	Ditto	Illustrated in Ferguson's Architecture.
(1a) Acha's Pillar, on the edge in the civil station, Delhi.	A Buddhist Lat.; about 300 B.C.	Systematic custody desirable.	Recently set up (1873).	Unnecessary.	None known.	None known.
11a. Zinat-ul-Masjid	A mosque with tombs; date A.D. 1716.	.....	.....	.....	Ditto	Ditto.
1b. Fatehpur Masjid	Mosque at end of the Chandni Chaud; A.D. 1616.	In use.	Repairs and improvements contemplated.	.....	.....	.....
1a. Palace in the Fort at Delhi; date about 1755 A.D. (See Appendix P. and Q.)	Built by Shah Jahan. The Diwan Khana is richly ornamented with mosaic on slate marble and a painted ceiling; other buildings, such as the Shish Mahal and King's Bath, are highly ornamental and full of interest.	In charge of the Military Works Department. Buildings requiring repairs are made over to the Architect Monument sub-division.	Repairs have begun and will be thoroughly carried out.	.....	Bourne and Shepherd have photographs.	Plans said to be in the Military Department. See also Ferguson. Drawings in my office.—H. H.
1b. Jaina Temple in Delhi.	Built in the beginning of the present or end of the last century; irregular for its beauty and statement.	In use.	.....	.....	Ditto	Details of the structure would be interesting. See Ferguson.

11a. Lal and Kala Domes, near the hills at Solani, about 1 mile from the town of Gurgaon.	Buildings known as the red and black domes; they are decorated with sculptures and are reputed to have been built by Khizrabad, date unknown.	Custody desirable.	Dilapidated; Indian wanted.	.....	None.	None.
11a. Kutub Khan, in the boundary of the town of Gurgaon.	A domed building of chunar and stone built by Kutub Khan, Khizrabad. Mansabat of the Emperor, about 400 years ago.	The inhabitants of Solani see it as a cattle-shed.	Dilapidated; is handsome and should not be allowed to decay further.	.....	None.	None.
11a. Alwardi Mosque, 3 miles from the Talab Gurgaon.	A mosque and tomb in chunar and red stone; the tomb has a tombstone red brick screen, built by Nawab Alwardi Khan about 150 years ago.	Not used.	Dilapidated; the tomb deserves restoring from decay.	.....	None.	None.

GURGAON DISTRICT.

In the official list none of buildings are described.

Punjab—*contd.*
Principal Ancient and Architectural Buildings, &c.,—*contd.*

Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
GURGAON DISTRICT— <i>contd.</i>							
11b	Sofna Mosque, near which are two hot and cold springs.	The old buildings are said to be a thousand years; the mosque dates from Shah Alam.	Used by (inhabitants); mode of custody unknown.	Good	.....	None	None.
11b	Farakhnagar Mosque, in the Town of Farakhnagar.	Built by the Nawab of the place in the reign of Muhammad Shah, 1655-54 A.D.; decorated with carvings.	Used for worship.	Good	.....	None	None.
11b	Hindu Temple at Sit Tal, 18 miles from Tolah Palah.	A building of chisams and stone with coloured frescoes, about 224 years old.	Ditto	Fair	.....	None	None.
11b	Modern Tomb and Chutris at Chakrawala.	The chutris is of chisam and stone, and is decorated with sculpture.	The tank used for bathing; no information about custody.	Good	.....	None	None.
11b	Mosque at Malab.	A building of chisam and stone with coloured decorations; built 200 years ago.	Used for worship; no information as to custody.	Good	.....	None	None.
11b	Mohammadan Shrine in memory of Allah Yar Khan in Ferozpur.	A monument, 40 feet square, of stone and chisams, with ornamental carvings; built 375 years ago.	A fakir lives in the shrine; no other certainly known.	Fair	.....	None	None.
11b	Jami Masjid, in the Town of Ferozpur.	A modern building with coloured decoration.	Used for worship.	Fair	.....	None	None.
KARNAL DISTRICT.							
<i>In the official list some 55 buildings are described.</i>							
11b	Tomb near Karnal, on the Trunk Road, called Durgah Kalastar Sahib.	A masonry enclosure, with a mosque and fountain; the tomb itself is of marble with sculptured decoration. It was built by Ghayas-ud-din, Emperor of Delhi, in memory of a fakir (1325 A.D.)	Sacred place of Mo.; Good	Good	.....	None	None.

1b	Muhammadian Tombs in the city of Panipat.	Decorated with marble sculptures; date 1325 A.D.	Sacred Muhammadan place; no information as to custody.	Good	None	None.
1a	Kabul Bagh, 1 mile from Panipat.	Formerly a mosque and garden built by the Emperor Baber to commemorate his victory over Ibrahim Lodi; A.D. 1527.	Not known	The garden has disappeared; the mosque requires repairs.	None	None.
11a	Mosque of Shaikh Tyrb inside the city of Karnal.	A masonry building of the time of Akbar; the cupola is covered with enamel.	—	Requires repair.	None	None.
11b	Jami Masjid, in the Town of Hissar.	A brick building 350 years old, decorated with coloured tiles.	Used for worship; no information as to custody.	Fair	None	None.
11b	Mosque near Hissar in the sarai close to the Delhi Gate.	A brick building 345 years old; decorated with coloured tiles.	Ditto	Fair	None	None.
11a	Tombs near Hissar	An old domed brick building with coloured tile-decoration; said to be 300 years old.	Occupied as a residence by the Deputy Commissioner.	Said to be much neglected.	None	None.
11a	Baro Dervaza, one of the gates of Hissar.	A brick gate, decorated with coloured tiles.	No information as to custody.	Fair	None	None.
11a	Domed Shrine at Tolana	A brick building, decorated with tiles of various colours; built 300 years ago by Asad Khan, Pathan.	Not occupied; no information as to custody.	Fair	None	None.
11b	Mosque in Tolana	A brick building, erected 250 years ago by Mir Fatah; it is decorated with red, blue, and yellow tiles.	Used for worship; no information as to custody.	Fair	None	None.
11a	Seven tombs at Badgar	These are of stone, Muhammadan in style; and one building has coloured decoration (tiles &c.) about 250 years old.	Not known	Good	None	None.

HISSAR DISTRICT.

In the official list some 30 buildings are described.

ROHTAK DISTRICT.

In the official list some 20 buildings are described.

Punjab—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Class.	Name of building or group of buildings.	General character.	Control.	Preservation.	Restoration.	Photographs.	Drawings or plans.
ROHTAK DISTRICT—contd.							
11b	Alamgiri Mosque at Balli.	A stone building erected by Aurangzeb Alamgir, about 1600 years ago.	Used for worship.	Noth repairs.	.....	None.	None.
SIRSA DISTRICT.							
<i>In the official list some buildings are described.</i>							
11b	Hindu Temple outside the town of Hissar. [Colonel Minchin, Commissioner of Lahore, tells me of some marble carvings excavated at Sirsa.]	A plastered brick building with coloured ornament; about 300 years old by report.	Used by Hindus.	Fair.	.....	None.	None.
UMBALLA DIVISION.							
<i>In the official list some buildings are described.</i>							
11b	Muhammadan Tomb, 12 miles west of Shahabad Thana.	A masonry building about 1700 A.D.; is the tomb of Shah Baidi and of an architectural character.	Used by Muhammadans for worship; mode of custody unknown.	Very good.	.....	By Lieut. Parker, Assistant Commissioner, Umballa.	None.
11a	Jami Masjid at Thanagar.	A solid masonry building; 1400 A.D.	Not in use; no custody known.	In ruins.	.....	.....	None.
11a	Gateway of the old Fort at Thanagar.	Solid masonry building; a good specimen of Muhammadan architecture; 1400 A.D.	Partly inhabited.	In ruins; part of the remains are tolerably perfect.	.....	.....	None.
1a	White marble Tomb at Thanagar.	.....	.....	.....	.....	.....	.....
11a	Mosque at Sadwara, 25 miles north-east of Umballa.	Solid masonry; date 1400 A.D.	Not in use.	In ruins.	.....	By Lieut. Parker, Assistant Commissioner, Umballa.	None.
11a	Old Muhammadan Home at Burra, 3 miles from Jagadhri.	A curious masonry house with coloured decorations inside; built by Shah Jahan, 1630 A.D.	No custody.	Ditto.	.....	Ditto.	None.

SIMLA DISTRICT

In the official list some 3 buildings are described.

11 b	Dhara Mandai at Pinjor, a Temple standing in water.	Very ancient; built of stone.	Used by Hindus.	In order.	None.	None.
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HILL STATES.

No official list.

Hill Temples	Many very picturesque and curious wooden deotas or Hindu temples, worthy of photography, description and preservation.
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LUDHIANA DISTRICT.

In the official list some 25 buildings are described.

11 b	Mosque and Tomb at Ludhiana Khas.	A plastered brick building with interior coloured; decoration supposed to have been built in the time of Alauddin by Shalikh Muhammad Sharif, afterwards buried there.	Used for worship; no information as to custody.	Good	Unnecessary	None.
11 b	Makbara Shah Diwan, a Tomb 1 mile to the west of the Town of Teharah.	A plastered brick building said to have been erected in the time of Akbar.	None known of; a grant of 100 bigas of land said to have been made over by Government for its maintenance.	Ruins	None	None.

JULLUNDER DISTRICT.

In the official list some 24 buildings are described.

11 b	Masjid Shalikh Darwaish, a Tomb and Mosque in Razi Shalikh.	A brick building built by Shalikh Darwaish, who came from Kabul in 1030 A.H.; a Pagan structure.	Used as a mosque; no information as to custody.	In tolerable order; but if not repaired regularly will soon give way.	None	None.
1 a	Sirad, or Travellers' Rest-house at Narnaulat. (See Appendix N.)	A brick building celebrated for its beautifully carved gates. Nawab, who is Jahangir, built this seat in 1620-21 A.H.	.....	The principal gateway has been repaired by Mr. Harcourt, Executive Engineer.	Photographs and drawings prepared in my Office.—H.H. C. 87-88.	See Cunningham's Vol. XIV, Plate XXI.

Punjab—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
JULLUNDER DISTRICT.—contd.							
1a	Garden and two Temples at Hadrawallah, close to Nakodar.	Brick buildings decorated with carvings and paintings; one of Mahammad Muwiz, A.D. 1612, the other of Haji Jamal, A.D. 1637.	.....	Repairs in progress under Mr. Harrington.	.....	None.	See Cunningham's Reports, Vol. XIV, plate XX.
1a	Dakshin Sarai, 8 miles from Nakodar.	A building of Shah Jehan's time. The gates covered with beautiful tile-work.	.....	Estimate has been prepared by Mr. Harrington. Extensive repairs required.	.....	None.	Under preparation.
KANGRA DISTRICT.							
<i>In the official list some 169 buildings are described.</i>							
1b	Temple at Talha Bhulair Jowala Mukhi.	A very famous temple, to which numbers of pilgrims resort.	Not stated.	.....	.....	None.	None.
1b	Nandakania Temple in the village of Jadrangul, Talha Kangra.	Very old and famous shrine.	Ditto.	.....	.....	None.	None.
1b	Kanja Mahadev Temple in the village of Kanara, 7 miles from Dharamala.	Temple dedicated to Shibi in the centre of a thick wood.	Ditto.	.....	.....	None.	None.
1a	Fort Kangra.	An old and famous fort.	.....	.....	.....	.....	.....
11b	Hindu Temples and Tanks in Kangra.	Famous for bathing and worship.	Not stated.	.....	Unnecessary.	None.	None.
11b	Temple at Baijunath.	A. D. 804.	Ditto.	.....	Ditto.	Bourne and Shepherd.	See Cunningham's Reports, Vol. V, plate XLIII.
11b	Banbandi Thakur.	Temple in the village of Phagran; very fine idol.	Ditto.	.....	Ditto.	None.	None.
11b	Hortumla Dabi.	Temple in the village of Gmishi; very ancient.	Ditto.	.....	Ditto.	None.	None.

10 b. Bagnath.	Temple in the village of Manry (Karan); a very famous temple.	Ditto	.....	Ditto	None	None.
11 b. Targau Narain	Temple in the village of Deor; very ancient.	Ditto	.....	Ditto	None	None.
AMRITSAR DISTRICT.						
<i>In the official list some 19 buildings are described.</i>						
1 b. Sikh Temple and sacred Tank called Darbar Sahib in the Town of Amritsar. (See Appendix M.)	A modern building (1776 A.D.) of marble with a copper gilt dome; sometimes called the Golden Temple; its walls are adorned with mural devices of figures and flowers.	Used by the Sikh priests.	.....	.....	Several photographs have been taken.	Plans and details of the temple are being prepared in my office.—H. H. C., 8-5-22.
1 b. Sikh Temple called Akal Bunga at Amritsar.	A plastered brick building, with coloured decorations and the upper story covered with copper sheets, date 1665 A.D.	In religious use.	.....	Kept in repair by the Sikhs.	Several photographs exist.	Ditto.
1 b. Gardens and Tomb called Baba Akal in Amritsar.	A brick and white stone building with coloured decorations and gilt roofs; a lofty tower is built over the tomb.	Religious institution.	.....	Ditto	Has been photographed.	Ditto.
1 b. Hindu Temple beyond the Longish Gate at Amritsar; date 1750.	A brick building situated on the Durjana Tank; has coloured decorations.	Used by travellers.	.....	.....	None	None.
1 a. Old Imperial Serai built on the Delhi and Lahore road by the Emperor Jahangir.	Three brick buildings having coloured decorations and encaustic tiles converted into villages.	Appears worthy of custody.	In ruins.	Kept in repair by the Sikhs.	None	None.
LAHORE DISTRICT.						
<i>In the official list some 95 buildings are described.</i>						
11 a. Chaulukji or Gateway, 14 miles from Lahore, on the Multan road.	This is a gateway leading to a garden which has been destroyed. The gate was built by Zeban Nisan, daughter of Alimgir, in 1751. It is of brick decorated with encaustic tiles.	.....	Repairs have been executed.	.....	.....	Plans and details of the gate are being prepared in my office.—H. H. C., 8-5-22.

Punjab—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings and plans.
LAHORE DISTRICT—contd.							
I a	Tomb of Ranjit Singh outside the Rohatni Gateway, Lahore.	A brick and marble building (1841) with paintings and sculptures. Government bears the expenses incurred in repairs.	In custody	.....	.....	Has been photographed.	None.
I b	Mayid Wazir Khan, near the Kalwa, Lahore.	A handsome brick building with coloured tiles, built in the reign of Shah Jahan.	Used by Mahomedan ladies; repairs urgent.	Bad	Great damage done by the maulvi who set the mosque on fire—H.H.C., 1874-75.	Ditto	Detailed drawings in my office—H.H.C., 1874-75.
I b	Badshahi Masjid near the Fort at Lahore.	A handsome mosque, built by Alamgir; is partly painted and sculptured.	Used by Mahomedan ladies.	.....	Ditto	Ditto	None.
I a	Fort at Lahore. (See Appendix L.)	Commenced by Mahmud of Ghazni, finished by Shah Jahan in 1644. Has some handsome buildings, and should be kept in a constant state of repair.	In Government custody.	Repairs about to commence.	.....	Ditto	Plans and drawings in my office—H.H.C., 1874-75.
I a	Tomb of Jahangir at Shahdara, 3 miles from Lahore. (See Appendix J.)	A marble and granite building, with sculptures and paintings, built by Shah Jahan, 1628.	.....	Repairs have commenced.	.....	Ditto	Detailed drawings in my office—H.H.C., 1874-75.
I a	Shahdwar Gardens, 6 miles from Lahore. (See Appendix K.)	Built by Shah Jahan in imitation of the great gardens in Kashmir; is kept up by Government.	In charge of the Municipality.	Repairs about to commence.	.....	Ditto	Ditto.
II a	Tomb at Mian Mir, in the native village.	Built by Durr Shak in the reign of Alamgir; sculptured and highly painted.	Custody seems desirable.	.....	Information required.	None	None.

GUJRANWALA DISTRICT.

In the official list some 15 buildings are described.

II a	Hivan Minar, 2 miles west of Shekhpura, Taluk Hafizabad.	A tank, summer-house and tower built in 1650 A.D. by the eldest son of Jahangir; the tank is very large, and the Haradiri of good architecture.	.....	Has been photographed by Major Mercat.	None.

RAWALPINDI DISTRICT.

In the official list some 6 buildings, etc., are described.

I a	Manigula Tapa	Buddhist Tapa which has been fully described by Cunningham.	Worthy of custody. In dilapidated state.	Should be repaired.	Has been photographed.	See Cunningham's <i>Archæological Reports</i> , Vol. II, pages 153 to 172, Vol. V, plates XXI—XXIV, and Vol. XIV, plates II to IV.
II a	Old Mound at Shah-Ab-dari	Old Buddhist remains described by Cunningham.	Is worthy of custody. In ruins.	Ditto	None	See <i>Archæological Reports</i> , Vol. V, plates XV II—XX, and Vol. XIV, plates V to X.

HAZARA DISTRICT

In the official list some 6 objects of interest are described.

II b	Small Domesd Cos Minar at Bat, 14 miles from Mangal.	Supposed to have been erected by the Emperor Jahangir on the Imperial road to Kashmir; he halted at Mangal.	Apparently none. Falling into ruins.	None known at present.	None known at present.
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MULTAN DISTRICT.

In the official list some 13 objects of interest are described.

I b	Shrine of Muhammad Yusuf, called Shah Ghariz, in Multan, near the Bohar Gate.	A brick building covered with colored encaustic tiles; 850 years old.	A place of pilgrimage; custody desirable.	Repairs are necessary.	Has been photographed.	None known at present.
I b	Hindu Temple called Narasingpur or Pahlidpur in Multan in the old Fort.	A brick building with finely carved wooden pillars.	Custody desirable.		Ditto	None.
I b	Shrine called Hazrat Shahid Musa Park in Multan.	A brick building of Aurangzeb's time decorated with paintings.	Ditto		None	None.

Punjab—*contd.*
Principal Ancient and Architectural Buildings, &c.—*contd.*

Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
MULTAN DISTRICT— <i>contd.</i>							
1b	A Dome of Octagonal Monument, called Rakun-ud-din Alim, in the Old Fort, Multan.	A brick building of Toghlak; A.D. 1300, decorated with glazed tiles.	A place of pilgrims; custody desirable.	Repairs are necessary.	.....	Has been photographed.	See Cunningham's Reports, Vol. V, plates XXXV (II) and XXXIX.
1b	Shrine called Shah Shams Tabrez, about half a mile outside the north-west corner of Multan.	A brick masonry building with paintings and bright encaustic tiles; 100 years old. Shams Tabrez was flayed alive on this spot as a martyr.	A place of Muhammadan pilgrimage; custody desirable.	Repairs are necessary.	.....	Idem.	None.
1b	Tomb of Bahawal Hak, in the Old Fort Multan.	An old domed building, now plastered dating A.D. 1264-1280.	.....	Repairs are necessary.	.....	None.	See Cunningham's Reports, Vol. V, plate XXXIX.
1b	Temple, Shrim and Tank of Suraj Kund, 4 miles to the south of Multan.	Of masonry, with paintings and encaustic tile-work.	A fair held twice a year, largely attended by Hindus; custody desirable.	Repairs are necessary.	.....	None.	None.
MONTGOMERY DISTRICT.							
<i>In the official list some 4 buildings are described.</i>							
1b	Tomb of Bawa Farid at Pakpattan, 27 miles from Montgomery.	A brick building with inlaid marble floor; about 650 years old; a renowned shrine.	Visited by pilgrims; made of custody unknown.	In preservation.	Unnecessary.	None.	None.
JIANG DISTRICT.							
<i>In the official return there are the only two buildings described.</i>							
b	Mosque at Chiniok, half a mile from Tahsil Chiniot, on the Grand Trunk Road.	Built of red and grey stone, the floor paved with mosaic of black and white marble; the tomb of white marble; there are paintings on the walls; date about 120 years old.	Held in reverence by Hindus and Muhammadans; a school is held in the building.	Fair.	.....	None.	None.

1b	Tomb of Hazrat Shah, half a mile from Tahsil Chind.	A white and black marble building; the outer walls are painted; the interior is decorated with gilding; the tomb of a Fakir, Hazrat Shah Burhan, built in Shah Jahan's time.	A fair build, yearly; Fair custody desirable.	None.	None.
MUZAFFARGARH DISTRICT.					
<i>In the official list these are the only two buildings described.</i>					
11a	Tomb of Nawab Tahar Khan at Sitpur on the Chumb, 60 miles from Muzaffargarh.	A brick building with encaustic tiles in green, black, yellow and blue; built in 1050 A. D. by Nawab Sultan Muhammad.	Not in use; custody desirable.	Has been photographed.	None.
11b	Tomb of Abdul Wahab at Daria Din Panoh, 45 miles north-west of Muzaffargarh.	A brick building with coloured decorations; about 200 years old.	Used for worship; custody desirable.	Ditto.	None.
DERA GHAZI KHAN DISTRICT.					
<i>In the official list some 4 buildings, &c., are described.</i>					
Nothing very important.					
DERA ISMAIL KHAN DISTRICT.					
<i>In the official list some 9 buildings are noticed.</i>					
11a	Fort at Umar Kol near Khys-pur.	Build of masonry; supposed to be very ancient; Hindu or Buddhist.	In ruins.	None.	None.
RAJNU DISTRICT.					
<i>In the official list 2 objects of interest are noticed.</i>					
11a	Mound at Rohri Tahsil, Mianwali.	Debris of walls in this mound were laid bare by the Indians in 1805, and several figures of Ganesha-Bacchan sculptures were excavated and sent to the Lahore Museum.	Custody seems desirable.	None.	None.
11a	Mound at Akra.	The remains of a Ganesha-Bacchan city.	Wants investigation.	None.	None.

Punjab—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Class.	Name of building or group of buildings.	General character.	Contd.	Preservation.	Restoration.	Photographs.	Drawings or plans.
JHELUM DISTRICT.							
<i>In the official list some 14 buildings, &c., are described.</i>							
IIa	Temple at Mallot, 10 miles north-west of Pind Dadan Khan.	A stupa building of a type similar to Kashmiran temples. An investigation would be valuable.	Contd. seems desirable.	Ruin	.....	Said to have been photographed.	See <i>Archæological Reports</i> , Vol. V, plates, XXV-XXVII.
IIa	Fort at Rhotax, 11 miles north-west of Jhelum.	An old Muhammadan fort with a fine gateway.	Certain parts used as a cattle-shed; over the gateway is a travellers' room.	Mostly ruined	.....	Gateway by Beglar.	None.
GUZERAT DISTRICT.							
<i>In the official list some 14 buildings, &c., are described.</i>							
IIa	Mung, 33 miles north-west of Guzerat, on the banks of the Jhelum.	A very old place; prolific in Indo-Greek coins.	None	None	.....	None	None.
SHAMPER DISTRICT.							
<i>In the official list some 11 buildings, &c., are described.</i>							
IIa	Mosque at Bhera	A plastered brick building covered with coloured decorations; 200 years old.	Used by Muhammadans.	Good; has lately been restored.	.....	None	None.
PESHAWAR DISTRICT.							
<i>In the official list some 13 objects of interest are mentioned.</i>							
IIa	Fortress at Kanigat on the hill above the village of Nussairistan, 9 miles north of the Swabi police station.	General Cunningham identifies it with Aconon. The fort contains a large number of Buddhist statues and sculpture.	.....	.....	.....	.....	.....
IIa	Shahbaz Garhi near Mardan	One of Asoka's earliest inscriptions, also B.C. General Cunningham identifies the locality as the city of Satalam.	.....	.....	.....	.....	See Report on Nussairistan, Appendix I, 1882-83, also

The engravings that

Punjab—concl'd.
Principal Ancient and Architectural Buildings, &c.—cont'd.

Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
BAHAWULPUR STATE.							
<i>In the official list some 64 buildings are described.</i>							
11 b	Pattan Munara, an old tower 7 miles north of Nausahra.	A curiously-built tower on what were the banks of the Indus; the remainder of an old town lie around.	Custody probably desirable.	Ruinous condition.	.....	None.	None.
11 b	Fort at Mow, Moharke, 6 miles west of Nausahra.	Mow fort is one of six built by Sai Shahut II, about 1600 A.D.; was taken by Shahi Haman Arghan in 1325 A.D.	A village is built on the top, to be out of the way of floods.	Fair.	.....	None.	None.
CHAMBA STATE.							
<i>In the official list some 8 buildings are described.</i>							
11 b	Hindu Temples at Chamba on the Ravi.	Stone buildings with sculptured decorations.	Used by Hindus.	Good.	.....	Photographed.	Mentioned by Vignoe drawings.
11 b	Temple at Mingola in Odaipur, 3 miles from Tehumath.	Highly ornamented with carvings in wood.	Used by Hindus.	Good.	.....	Worthy of photography.	Worthy of drawings in detail.
Kashmir.							
Some Principal Ancient and other Native Architectural Buildings in Kashmir.							
Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
1 b	Garden at Manas Bal, 10 miles north of Srinagar.	Laid out in Akbar's time, 300 years ago; the stone buildings are ruined.	Custody desirable.	.....	.....	Photographed.	None.

In the official list some 38 objects of interest are described.

1 b	Temples at Pattan, 12 miles north-west of Srinagar.	Date from 883 to 901 A.D.; handsome stone buildings with sculptured columns, &c., (see <i>Ancient Buildings in Kashmir</i> ; H. H. Cole, 1896.)	Ditto	Ruins; preservation very desirable.	.....	Ditto	None.
1 b	Temple at Bhaniwar, west of Barawala and 14 miles beyond Naxosahira.	An interesting Hindu temple and enclosure of stone.	Occupied by a hakim; no regular custody to prevent damage.	In fair order; should be preserved.	.....	Ditto	None.
1 b	Hindu Temple on the Takht-i-Mulhman Hill, called Jeebh-kawarn.	A solid stone building, with thick walls and pyramidal roof; date about 220 B.C.	Used for Hindu worship; custody desirable.	Ditto	.....	Ditto	Drawn. See <i>Ancient Buildings in Kashmir</i> ; H. H. Cole.
1 b	Garden and Baradari called Chashmah Shahr, on the Dal Lake, near Srinagar.	The tank is of stone and the Baradari of wood and brick, built by Akbar.	Custody desirable.	Ditto	.....	Ditto	None.
1 b	Garden and Baradari at Shalimar, Bagh on the Dal Lake, east of Srinagar.	Built by Shah Jahan, in brick and stone.	Ditto	Fair order	.....	Ditto	None.
1 b	Garden called Nisbat Bagh, on the Dal, east of Srinagar.	Built by the father-in-law of Shah Jahan; a beautiful garden, Baradari and fountain.	Ditto	Fair order; should be systematically preserved.	.....	Ditto	None.
11 b	Temple at Pordothan, 3 miles south-east of Srinagar.	Beautiful Hindu temple in stone; about 903 A.D.; stands in water.	Ditto	Ruined; should be cleared of jungle and preserved.	It would be possible to remove this.	Ditto	See plans in <i>Cole's Ancient Buildings in Kashmir</i> .
11 b	Mosque of Shah Hamadan in Srinagar.	An interesting wooden building.	In use by Muhammadans.	Fair	.....	Ditto	None; plans are wanted.
1 b	Jami Masjid in Srinagar.	A large building with wooden pillars carved.	Custody desirable.	Dilapidated	.....	Photographed	None; details would be valuable.
11 b	Hindu Temple at Pampur.	An interesting stone building.	Ditto	Ruined	.....	Not photographed.	None.
11 b	Avalikpora Temples, 13 miles north-east of Srinagar; date 825 to 904 A.D.	Old cloisters and temples partly buried; the stone carvings are good; a most interesting road after Marzand the most important in Kashmir.	Custody wanted	Ruins; should be well looked after.	Impossible	Photographed	See <i>Cannigham and Ferguson, See Cole's Ancient Buildings in Kashmir</i> .

Kashmir—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
II b	Temple at Martand, 3 miles east of Islamabad.	The finest example of the old Kashmiri style of architecture, but in great ruin.	Custody much required.	} Require attention	.....	Photographed often.	See Cunningham's <i>Hamir, Ferghana, &c.</i> , Vol. II, page 276. None.
II b	Vernag Garden and Spring.	Built by Jahangir in a most curious place, full of sacred fish.	The Hindus take care of the place; but it wants some systematic custody to preserve it.		.....	Photographed.	None.
II b	Hindu Temples at Wangul, about 25 miles from Srinagar.	Old buildings of stone, dating from the commencement of the present century; are much out of the way.	Custody desirable.	No preservation, but should be kept clear of jungle and preserved by an enclosure.	.....	Ditto.	See Cunningham's <i>Hamir and Cohn</i> .

Rajputana Agency.

Some Principal Ancient and Native Architectural Buildings in the limits of the Rajputana Agency.

Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
I b	Chailya Cave at Dhumnar, Kotah Agency.	About 300-600 A.D.; a rock-cut temple.	Custody desirable.	.....	.....	.....	See Cunningham's <i>Archæological Reports</i> , Vol. II, page 276.
I b	Chailya Caves at Khulvi, Kotah Agency.	Probably the most modern group of Buddhist caves in India.	Ditto.	.....	.....	.....	See <i>Archæological Reports</i> , Vol. II, page 281.

1b	Temple at Chaudisvari near Jhalra Patan, Jhalawar, Kotah Agency.	680 A.D., has a beautifully carved roof.	Ditto	.....	.....	See Cunningham's Reports, Vol. II, page 367; also Ferguson and Tod. Drawings wanted.
1b	Temple at Baroli, Kotah Agency.	Erected before 750 A.D.; situated not far from the falls of the river Chumbhal; is now a deserted temple.	Ditto	.....	.....	.....
11b	Nuptial Hall at Baroli in the Kotah Agency, Rajputana.	An open pillared building with a Jain roof.	.....	.....	.....	.....
11b	Ancient Temples at Rangarkh in the Kotah Agency.	Several buildings of ancient date principally in ruins; one is in fair condition.	Kotah Durbar	.....	Photographed by Mr. Beglar.	.....
1b	Ancient Town and Temples at Kishor Vilas in the Kotah Agency.	One of the Temples called Kakeri Deora is well worth restoration.	Ditto	.....	Has been photographed.	.....
11b	Ancient Palace at Ranpur in the Kotah Agency.	Palace and pavilion on the banks of a lake.	Ditto	.....	.....	.....
11b	Capitals of the Chiefs of Marwar at Mandor.	The buildings are neglected.	Jodhpur Durbar	.....	.....	.....
11b	Temple at Mahanal, Rajputana.	A beautiful building, with a fine stela and sculpture. There is also an old palace near the temple.	.....	.....	Photographed by Mr. Beglar.	.....
11b	Bijoli, Rajputana	One three-shrine temple, others over each shrine. Elaborate carving of masonry. One another temple with kumkars over the porches.	.....	.....	Mr. Beglar has photographed them.	.....
1b	The Raj Samund Lake, about 25 miles north of Udaipur city in Meywar, 3 miles by rail.	Constructed in 1661 A.D. The front to the north is of marble and very decorative.	Meywar Durbar	.....	.....	.....
1b	The Jai Samund or Debur Lake, about 20 miles southeast of Udaipur city, in Meywar.	Constructed by Maharaja Jas Singh, end of seventeenth century; is 9 miles long by 3 broad, and has a beautiful masonry dam.	Ditto	.....	.....	.....

Rajputana Agency—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographed.	Drawings or plans.
I b.	The Udaï Sagar, a lake 5 miles east of Udaipur, 24 miles by 14 miles, in Meywar.	Has a massive dam.	Meywar Durbār	.....	.....	.....	.....
I b.	The Mandal lake about 70 miles north-east of Udaipur, in Meywar.	A column of Victory is said to have stood in an island on the lake.	Ditto	.....	.....	.....	.....
II b.	Jahazpur Fort between Bundi and Meywar, in Meywar.	Has some interesting buildings.	Ditto	.....	.....	.....	.....
II b.	Kumalgurh Fort, in Meywar.	Erected by the Rana Khumbha; has temples in it of interest.	Ditto	.....	.....	.....	.....
II b.	Jain Temples in the Sadri Pass, in Meywar.	Fine buildings.	.....	.....	.....	.....	See Pergamon.
II b.	Nagda, Temples near Udaipur, Meywar.	Very elaborate Jaina style.	Meywar Durbār	Well worthy of repair.	.....	I have photographs.	.....
I b.	Jaina Tower of Sri Allat at Chittore, in Meywar. See Appendix G.	About 80 feet high, and adorned with sculptures from summit to base; date about 800 A.D.	Ditto	Reins, and being damaged by vegetation.	.....	Has been photographed.	This has been surveyed for repairs.
I b.	Jaina Temples on Mount Abu.	Two temples have beautiful marble carvings and details; date 1023 to 1247 A.D.	Sirhi Durbār	Require careful repair.	.....	Ditto	See Pergamon. Drawings wanted; will be surveyed. See Ind's West-ern India.
II b.	Remains of Jaina Temples at Chaudrasali, a few miles south of Mount Abu.	About 1015 to 1250 A.D.; destroyed by Mohammedans in the middle of the 14th century.	Has been used as a quarry.	.....	.....	.....	.....
I a.	Mosque at Ajmir, called the Ahar-din-ah-Jampra.	An elaborate piece of architecture (originally the building was a Hindu or Jain Temple; converted 1211-30 A.D.)	In custody	.....	Has been partially restored by the Executive Engineers, Mayo College, Ajmir.	Has been photographed.	See Cunningham's Reports, Vol. II, page 259.
I a.	Dastat Bagh, Ajmir.	Built by Jahangir.	Repairs to one pavilion in progress.	.....	.....	I have photographs.	Survey has been made.

11b	Temples on the shore of the Lake at Poshim.	Numberless temples and buildings on the shore of the lake erected by Munt Singh of Jaipur, Jewel of Malt of Bhawalpur, Hilly Sing at Marwar, and Holkar's famous queen, Alakya Bai: a beautiful collection of Rajputana architectural styles.	—	—	—	Photographs: See Roussier, pages 215 and 217. Worthy of drawing.
11b	Tower of Victory in the Fort at Chittore, 120 feet high, in Marwar. (See Appendix G.)	Erected by Kumbho Rana to commemorate his victory over Mahmud of Malwa in 1432 A.D.	Custody desirable	Requires repairs	—	Has been photographed.
11b	Jain Temples, the Sangha Chauri, Temple of Virji, &c. (See Appendix G.)	Ruin in the Fort at Chittore	Worthy of custody	Worthy of preservation.	—	I have photographed.
11b	Palace at Amber, the original Capital of the Jaipur State.	Date about 1592 A.D.	Jaipur Durbar	Requires preservation.	—	Has been photographed.
11b	Stone circles at Doona, Jaipur State.	See Cunningham's Vol. VI, plate XII.	—	—	—	—
11b	Palace of the Maharaja of Jaipur at Toda Rai Sing. Temples at Toda Rai Sing. Jaipur State. Temples at Bhanganur, Jaipur State.	There are said to be fine carvings in these.	Ditto	The Durbar is willing to see to their conservancy.	—	—
11b	Temple of Viraji Devi, south of Toda in Jaipur State.	A handsome building erected by the father of the Prati Raja.	Ditto	—	—	—
11b	The Mandel Fort, the Tawangarh Fort in Machhipur Tehsil, Bhadrapur Fort in Udaipur Tehsil, Kalafolkia-kund in Muzil Tehsil, Karnali State.	These are reported by the Karnali Political Agent as being the principal monuments in the State.	Karnali Durbar	The Durbar is not in a position to find funds for repairs.	—	—
11b	Large Pathan Tomb at Tilaxa, 10 miles north-west of Udaipur.	Said to be the Tomb of Akbar-ud-din Alami.	Udaipur Durbar	—	—	—

Rajputana Agency—concd.
Principal Ancient and Architectural Buildings, &c.—contd.

Class	Name of building or group of buildings	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
1b	<i>Tomb of Rajah Bahadur at Udaipur.</i>	A modern chhatra with considerable architectural pretensions in history. Monuments reported to be of interest in Udaipur.	In custody	<i>Requires repair.</i>	.....	Has been photographed.	.....
11b	Fazal Jung's Tomb at Udaipur. Temple of Chaudhri and Mahadevi at Bhungar. Temple of Nri Kant above the village of Tehia. Rajput village, one of the most interesting places in the State. One of the Rajput palaces is of white marble, another is covered with mirror mosaics and curious frescoes.		Udaipur Durbar	The Durbar will arrange for their conveyance.	.....	.....	.....
11b	Temple of Kumbhal Patan—on the banks of the Chambal, Bundi State.	The present shrines were rebuilt during the reign of Maharaja Raja Chattr Sal A.D. 1625-50. An object of Muhammadan veneration.	Kota and Bundi.	The fine deep carvings of the exterior have been whitewashed.	.....	.....	.....
11b	Mosque and Tomb at Dab, 21 miles west of Dholpore.						
11b	Mosque at Dholpore.	Built A.D. 1537, and is handsome.					
11b	The Tomb of Shah Samfahda near Dholpore.	An object of veneration to the Muhammadans.	Dholpore Durbar.	The Maharaj Rana is willing to take any necessary steps for their repair.	.....	.....	.....
11b	Tomb of Mahmud Khan, one of Akbar's Generals, near Dholpore.	A handsome building.					
11b	A range of Palaces used as a shooting lodge by Shah Jahan, near Bar; 21 miles west of Dholpore.	Built on the margin of a lake, 1673 to a great extent ruined.					
1b	<i>Isolated Palaces at Udaipur, Mysore. (See Appendix E.)</i>	The interiors decorated with marble and glass mosaics.	Used by the Maharana.	Being restored by the Maharana.	.....	I have photographed.	See Kowalek's India and its Native Princesses, page 150.

		A large and magnificent building, used by the Maharajahs of Udaipur.	In use	Will be restored by the Maharajah of Udaipur.	.....	.....	.....	.....	.....
1b	Palace of Udaipur, Mysore. (See Appendix H.)	.....	Custody desirable	.....	.....	.....	.....	.....	.....
1b	Contingent of Singar Singh at Udaipur, in Mysore Agency	.....	.....	.....	.....	.....	.....	.....	.....
1b	Contingent of the Maharajah of Udaipur at Alwar, Udaipur.	.....	In custody of the Rajah's people.	.....	.....	.....	.....	.....	.....
1b	Chattri of the Bhurpur Rajah at Govindpur, near Bhurpur.	.....	.....	.....	.....	.....	.....	.....	.....
1b	Basidi or wall, built by Dabir, in commemoration of his victory at Kanoor near Bhurpur.	.....	.....	.....	.....	.....	.....	.....	.....
1b	Palace at Dug (Deng) in the Bhurpur territory.	.....	Used by the Rajah, also by visitors.	Fair	.....	.....	.....	.....	.....
11b	Palace of Durgan Sol at Bhurpur.	.....	Udaipur State	.....	.....	.....	.....	.....	.....
11b	Temple of Mira Bai at Chitlers.	.....	.....	.....	.....	.....	.....	.....	.....
1b	Ancient Maruti and Minu, at Bhurpur, south of Bhurpur.	.....	.....	.....	.....	.....	.....	.....	.....

Central India Agency.

Some Principal Ancient and other Native Architectural Buildings in the limits of the Central India Agency.

Cham.	Name of building or group of buildings.	General character.	Country.	Preservation.	Restoration.	Photographs.	Drawings or plans.
1a	Buddhist: Tope at Sanchi, near Bhopal. (See Appendix E.)	Very ancient ruins, with rolling and (greyish) date of approx. B.C., rising 250 ft. A.D.	.....	.....	.....	.....	.....

Central India Agency—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
II a	Tower, sculptured Gateway near the village of Gyaipore, near Bilhisa, Bhopal Agency.	A very handsomely carved gateway. Brahminical religious art.	.....	.....	.....	Photograph by Mr. Beglar.	.....
II a	Remains of Jain Temple at Gyaipore, near Bilhisa, in Bhopal.	Beautifully carved stone columns, about 1850 A.D.	.....	.....	.....	Have been photographed.	See Ferguson and Cunningham's Vol. X, plate XI.
II a	Temple of Bhojpur near Bhopal.	.....	.....	.....	.....	.....	.....
II a	Remains of a Buddhist Tower, sculptured female statue; creosote capital, and a capital of a pillar called the Kalpa Tree, or wishing tree.	Fragment of a Buddhist Tower; sculptured female statue; creosote capital, and a capital of a pillar called the Kalpa Tree, or wishing tree.	Custody desirable	Ruin	.....	Photographed by Mr. Beglar.	See Vol. X, A. C. Cunningham's plates XII to XV.
II a	Ruin at Eran, 50 miles north-east of Bilhisa.	.....	.....	.....	.....	.....	See Cunningham's Vol. X, plates XXIII to XXX.
II a	Udaygar, near Bilhisa, Bhopal Agency.	Brahminical caves, in one a colossal sculpture of the Varaha Avatara; also a Chandra Gopala cave, dating commencement of the Christian era.	.....	.....	.....	Ditto	See Cunningham's Vol. X, plates XVI to XIX.
II a	Gadherol Temple at Pathari in the Native State of that name, Bhopal Agency, 30 miles north-north-east of Bilhisa.	An important and interesting group of temples of the 6th or 7th centuries, with two handsome towers or gates to the enclosure of the buildings. Brahminical first; then used by Buddhists.	.....	.....	.....	Ditto	See Cunningham's Vol. XI, plates VIII to XI.
II a	Achalpur, ruins of temples which a road contractor was opening out near Dalamba, between Rudan and Namaheri.	.....	.....	.....	.....	.....	.....

No.	Name of Temple, Khajuraho, Bundelkhand Agency.	The capital of the pillar consists of a disc fluted, with a square abacus, height 42 feet, 100 A.D.	A very fine pile; beautiful sculpture round lower walls; roots and siliars most elaborate.	.....	.....	.....	.....	.....
11 a	Late-Monolithic Pillar at Pathari, Bhopal Agency.	The capital of the pillar consists of a disc fluted, with a square abacus, height 42 feet, 100 A.D.	A very fine pile; beautiful sculpture round lower walls; roots and siliars most elaborate.	.....	.....	.....	.....	.....
1 b	Large Jain Temple, Khajuraho, Bundelkhand Agency.	The capital of the pillar consists of a disc fluted, with a square abacus, height 42 feet, 100 A.D.	A very fine pile; beautiful sculpture round lower walls; roots and siliars most elaborate.	.....	.....	.....	.....	.....
1 c	Temple of Vamash, Khajuraho, Bundelkhand Agency.	The capital of the pillar consists of a disc fluted, with a square abacus, height 42 feet, 100 A.D.	A very fine pile; beautiful sculpture round lower walls; roots and siliars most elaborate.	.....	.....	.....	.....	.....
1 d	Temple of Chaturbhuj, Khajuraho, Bundelkhand Agency.	The capital of the pillar consists of a disc fluted, with a square abacus, height 42 feet, 100 A.D.	A very fine pile; beautiful sculpture round lower walls; roots and siliars most elaborate.	.....	.....	.....	.....	.....
1 e	Temple of Nandi, Khajuraho, Bundelkhand Agency.	The capital of the pillar consists of a disc fluted, with a square abacus, height 42 feet, 100 A.D.	A very fine pile; beautiful sculpture round lower walls; roots and siliars most elaborate.	.....	.....	.....	.....	.....
1 f	Temple of Chaturbhuj, Khajuraho, Bundelkhand Agency.	The capital of the pillar consists of a disc fluted, with a square abacus, height 42 feet, 100 A.D.	A very fine pile; beautiful sculpture round lower walls; roots and siliars most elaborate.	.....	.....	.....	.....	.....
1 g	Temple of Vasuvash, Khajuraho, Bundelkhand Agency.	The capital of the pillar consists of a disc fluted, with a square abacus, height 42 feet, 100 A.D.	A very fine pile; beautiful sculpture round lower walls; roots and siliars most elaborate.	.....	.....	.....	.....	.....
1 h	Temple of Rameshwari, Khajuraho, Bundelkhand Agency.	The capital of the pillar consists of a disc fluted, with a square abacus, height 42 feet, 100 A.D.	A very fine pile; beautiful sculpture round lower walls; roots and siliars most elaborate.	.....	.....	.....	.....	.....
11 a	Bharat Tapa	The capital of the pillar consists of a disc fluted, with a square abacus, height 42 feet, 100 A.D.	A very fine pile; beautiful sculpture round lower walls; roots and siliars most elaborate.	.....	.....	.....	.....	.....

Photographed by Mr. Hughes.

Has been badly repaired in parts.

Jungle and overgrowth requires removal.

Portion of the wall and one gate have been removed by General Cunningham to the Calcutta Museum.

See Cunningham's Archaeological Reports Vol. II, page 312-419, and Vol. X, plates VIII to X; also Ferguson and Dittus.

Dittus.

Dittus.

Dittus.

Dittus.

Dittus.

See Cunningham's Vol. VI, plate XII.

Central India Agency—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
H a	Circular Lingam temple at Gundaloham (the Soti river, Berar State, Central India).	The circular plan of the sanctum is unique.	....	....	....	Photographed by Mr. Beglar.	See Vol. XIII, <i>Archæological Reports</i> , plates I to IV.
H a	Temple at Uthapur, near Bilhina, in Bilaspur.	Dating about 1600 A.D.; and carved with great precision and delicacy.	Custody desirable.	In comparatively good condition.	....	....	See Ferguson, page 457. Also Cunningham's Vol. VII, plates VI and VII.
I a	Two <i>Tandya Temples</i> in the Fort at Gwalior (the <i>Soti</i> river).	Finished about 1005 A.D.; and covered with elaborate sculpture.	....	Have been cleaned and repaired.	....	Have been photographed.	See Ferguson, and Cunningham's Report, Vol. II, pages 331—333.
I a	<i>Tandya-Mosque</i> at Gwalior.	Is in the Fort at Gwalior; a pile of ruin, dating from the 12th or 13th century.	See Appendix F.	Has been repaired and cleaned.	....	Has been photographed.	....
I a	<i>Palace</i> at Fort at Gwalior.	Built by Man Singh (1560-1593); a remarkable specimen of a Hindu palace; the outer walls ornamented in parts with channelled brick.	....	The palace has been opened out, cleaned and repaired.	<i>Plans and drawings in my office—H. H. C.</i>	Ditto.	....
I a	Hindu Temple at Paraul, in Bilhina, north of Morar, Gwalior.	Very remarkable figure sculpture. The Temple is enclosed in a Fort.	....	Some sculptures removed to Gwalior by Major Smith.	....	Has been photographed.	See Ferguson.
I b	Temple of Muhammad Ghazni, Gwalior.	Erected in Akbar's reign; has beautiful tracery or pierced stone work.	Custody desirable.	Repairs required.	....	....	<i>Drawings in my office—H. H. C.</i>
I b	<i>Great Mosque</i> and <i>mosque</i> at Bilhina and other buildings of great interest at Bilhina, Bilhina—see page 457.	1650-50 A.D.	....	Repairs commenced by the Maharaja of Dhaur.	....	....	....
I b	Palace at Disturb, in Bandish.	A large block of buildings of a pleasing architectural character.	In use.	Information wanted.	....	Has been photographed.	Drawings wanted.
I b	Palace at Urecha, in Bandish.	A very picturesque combination of domes and gateways.	Ditto.	Ditto.	....	Ditto.	Ditto.

I a	Concepts of the Scindias, Gwalior modern	In custody	Information wanting	Has been photographed.	See Cunningham's Reports Vol. II, page 304.
I b	Temples said to be Jain, at Sonaghat, near Daultabad, in Bundelkhand.	In use	Idem	Has been photographed.	See Cunningham's Reports Vol. II, page 304.
II b	Old Hindu Palaces at Naxos, Gwalior State.	.....	.....	.....	.....

Central Provinces.

Some Principal Ancient and other Native Architectural Buildings in the Central Provinces.

Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
II a	Remains of Hindu Temples and a fine Gateway in the Nimga District at Mandla on the Nerbudda.	.....	.....	.....	.....	.....	A survey of the place has been made in my office.
II a	Ancient Temples in the Mahadeva Hills, Pachmarhi, Hoshangabad District.	.....	.....	.....	.....	.....	.....
II a	A rock-cut Temple at Udhagamalur, Hoshangabad District.	.....	.....	.....	.....	.....	.....
II a	Several Bathing-places and Hindu Temples at Sagar.	.....	.....	.....	.....	.....	.....
I a	Antiquities and a Pillar of Bulla Ganga at Khas, in the Sagar District.	.....	.....	.....	.....	.....	.....
II a	Remains of Mosques, Tombs, and Buildings round the Lake and Fort at Tihazib, in the Sagar District.	.....	.....	.....	.....	.....	.....
II a	Remains of Jain Temples in the District.	.....	.....	.....	.....	.....	.....
II a	A famous Cattle and goat race of the Palaces of the old Gond Rajahs in the Narsingpur District.	.....	.....	.....	.....	.....	.....

In the official list there are 106 buildings, &c., mentioned.

Some temples in repair others in ruins.

Remains are wanted.

Described by Cunningham.

Central Provinces—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
IIa	Remarkable Temple at Bhera Ghāt, 9 miles from Jabalpur.	An inner shrine, surrounded by a domed circular chamber, with many sculptures.	.....	.....	.....	.....	See Cunningham's Vol. IX, plates XII to XVI.
IIa	Ruins of a Mahal at Garha, 2 miles from Jabalpur.	Built by Madan Singh in 1500 A.D.	.....	Said to be worth repairs.	.....	.....	.....
IIa	Ruins at Karandel near Tewar, in the Jabalpur District.	Well-known ruins, from which stones have been removed for Railway construction.	.....	.....	.....	.....	.....
IIa	A small Temple and ruins of pillars at Kevnagar, in the Mandla District.	There is an inscription on the temple, of which a rubbing is required.	.....	.....	.....	.....	.....
IIa	Some 40 or 50 Hemispherical Temples at Gosaur, in the Seoni District.	Very elaborate buildings in sandstone.	.....	.....	.....	.....	.....
IIa	One of the ancient Gateways at Panwar, in Warilla District.	One gate recently removed to make way for modern improvements.	.....	.....	.....	.....	.....
IIa	Two very fine Temples at Parsoni, in the Nagpur District.	.....	.....	.....	.....	.....	.....
Ia	Temples and Remains of all kinds of Buildings at Rameshtek, in the Nagpur District.	.....	.....	.....	.....	.....	.....
IIa	Temple at Armoni, Nagpur district.	A curious building with three cells dedicated to Siva.	.....	.....	.....	.....	See Cunningham's Vol. VII, plate XIII.
IIa	A fine Temple of Mahadeva at Jangar, in the Bilaspur District.	A very complete building of the fourteenth century, with minute and quaint sculptures.	.....	.....	.....	.....	See Cunningham's Vol. VII, plate XIV.
	The district of Balasahar is said to contain hundreds of Buddhist Temples, the exact localities of many of which are not known. At Bhindal there is a Lat lying on the ground.	.....	.....	.....	.....	.....	.....

11 a	Temple of Mahadeva at Pali in the Bilaspur District.	Said to be the finest temple in the district.	.....	.....	.....	.....	Plan by Cunningham, see Vol. XVII, plates XX to XXIII.
11 a	Countless number of Tanks and Temples at Ratanpur in the Bilaspur District.	.....	.....	.....	.....	.....	See Cunningham's Vol. VII, plate XXI.
11 a	A Temple of Boram Deo in the Bilaspur District.	Has an inscription, said to be dated 103 A.D.	.....	.....	.....	.....	Plan by Cunningham, see Vol. XVII, plates IV to X.
11 a	Remains of very old and interesting Temples at Mahār, in the Bilaspur District.	A deserted building	.....	.....	.....	.....	See Cunningham's Vol. VII, plate XXI.
1 a	Great Temple of Amarakantak, Bilaspur District.	.....	.....	.....	.....	.....	Plan by Cunningham, see Vol. XVII, plates IV to X.
1 a	Celebrated Temple of Rajiva Lochan at Rajin.	An inscription is dated 739 A.D. (see <i>Antiquary Researches</i> , Vol. XV.)	.....	.....	.....	.....	See Cunningham's <i>Archæological Reports</i> , Vol. IX, plates XX to XXIV, also XXXI to XXX.
11 a	Architectural remains at Bhandak, in the Chanda District.	These are of great age and interest among them some cave temples, &c.	.....	.....	.....	.....	See Cunningham's Vol. IX, plates XXII & XXIII.
1 a	An ancient and beautiful group of Temples and Monastery at Markanda, in the Chanda District.	.....	.....	.....	.....	.....	See Cunningham's Vol. XIII, plate XI to XVI.
11 b	Famous old Temple of Ramchandra at Bhudachallan, in the Upper Godavery District.	Supported by an annual endowment of Rs. 12,000 from the Nizam's Government.	.....	.....	.....	.....	See Vol. IX, also <i>Archæological Reports</i> , Vol. IX, plates XI to XVI.
1 a	Two Mosques and Jami Masjid at Burhanpur.	Cut from Mosques during roughly A. D. 14th and 15th.	.....	.....	.....	.....	See Cunningham's Vol. IX, plates XXII & XXIII.
1 a	Unmistakable Rajin at Ranpur Jural Patna State.	.....	.....	.....	.....	.....	See Cunningham's Vol. XIII, plate XI to XVI.
11 b	Gupta Temple at Yegow, 2 miles north of Bahuribahal, Central Provinces.	A fine example of the Gupta style of architecture.	.....	.....	.....	Has been photographed by Mr. Beglar.	See Vol. IX, also <i>Archæological Reports</i> , Vol. IX, plates XI to XVI.

Central Provinces —contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Class.	Name of buildings or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plan.
II b	Deogarh, in the Lalitpur District, Central Provinces.	Gupta Temple, A.D. 600-700; excellent sculptures of a spiritual kind.	.....	Well worth preserving.	.....	Photographs by Mr. Beglar.	See Vol. X, <i>Archaeological Reports</i> , and plates XXXIV-XXXVI.
II a	Temple of Bhamburda, Lalitpur District.	.....	.....	.....	.....	.....	See Cunningham's <i>Antiquities</i> , Vol. X, plate XXXI.
II a	Chanderi, old city and Fortress in the Lalitpur District.	.....	.....	.....	.....	.....	See Vol. II, <i>Archaeological Reports</i> , plates 401-412.

Haiderabad.

Some Principal Ancient and other Native Architectural Buildings in the Nizam's Territory, Haiderabad.

Class.	Name of buildings or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
I b	Dravidian Temple, the Kalles at Ellora.	One of the most singular and interesting architectural monuments in India, cut in the rock; date 750-950 A.D.	Requires guarding.	Has been damaged by Muhammadans.	.....	.....	See Daniell's <i>Views of Ellora</i> .
I b	Caves at Ellora, Aurangabad District.	Rock-cut temple; about 600 A.D.	Custody desirable.	.....	.....	.....	See Ferguson and Daniell.
I b	Chaitya Caves at Ellora, Aurangabad District.	Rock-cut temple with coloured friezes and handsome sculptures.	Ditto	.....	.....	Has been photographed.	See Ferguson.
II b	Chaitya Caves at Ajanta.	.....	Doors here have been fitted in the cavity by the Nizam's Government.	.....	.....	Have been photographed.	See Gill, Ferguson, and Daniell.
II b	Jaipur Temple at Asowah, near Ajanta.	Beautiful carved stone pillars.	None.	Ruins.	.....	Photographs by Major Gill.	.....

II b	Chalukyan Temple at Barchinpur.	A temple, now Haderahad, called by Ferguson, the most simple form of a Chalukyan temple.	Certainly desirable.	Ditto.		Has been photographed.
II b	Four Kirti Stambhas or stone Gateways in Worungul.	Built about 1165 A.D. by Pratihara rulers.	Apparently in good condition.	.....	.....	Has been photographed.
II b	Temple at Hanumancondah in the Worungul District.	Erected in 1165 A.D. in the Pratihara style of Chalukyan architecture.	Certainly desirable.	.....	.....	Has been photographed.
II b	Mosque at Kailasgah.	(1275-1285) is remarkable. Pratihara building, the whole of the area being covered in.	Repairs are about to be undertaken by the Nizam's Government.	.....	.....	Ditto.
II b	Tombs of the Ikard Shahi Dynasty at Bidar.	1420-1600 A.D. interesting buildings.	.....	.....	.....	.....
II b	Maharaja's in Bevar, near Gadagpur.	All of the modern domed style.	.....	.....	.....	.....
II b	Temple at Malkur, Huddana District.	A large temple with Jain columns.	.....	.....	.....	.....
II b	Bharu Hemaripanti Temple at Lonar, Malkur, Huddana District, Bevar. (The term Hemaripanti is derived by tradition from a sorcerer Hemaripanti, who used to come to build temples in one night.)	Finest early Hindu building in Bevar, covered with sculptures (see Mrs. Lyall's account in the <i>Journal of the Asiatic Society</i> , page 120).	.....	.....	.....	.....
II b	Group of Jain Temples at Mahalingpur, near Indapur.	A beautiful group of buildings near waterfalls.	.....	.....	.....	.....

Maisur.

Some Principal Ancient and other Native Architectural Buildings in the Maharajah's Territory, Maisur.

Class	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
II b	Jain Stupa at Vannur.	This image is 35 feet high.	Information wanting.	.....	.....	.....	.....
II b	Jain Stupa at Sravanabelagola, near Srirangapatnam.	This statue is 70 feet high. Wellington went to see it at the time of the Siege of Srirangapatnam, 1799.	Ditto.	.....	.....	Has been photographed.	.....
II b	Jaina Basilica at Sravanabelagola, near Srirangapatnam.	There are 15 of these temples which are more or less of ornamental masonry.	None known; well worth looking after.	Information wanting.	.....	Has been photographed.	None.

Maisur—contd.
Principal and Ancient Architectural Buildings, Sec.—contd.

Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
1a	<i>Temple at Somnathpur</i>	Built by Viraditya Ballala in 1243 A.D.; very elaborate shrine, with carving in stone.	Said to be in charge of the Assistant Commr. at Maisur.	.....	.....	Has been photographed.	See Ferguson.
1a	<i>Great Temple at Halebidu</i> —commenced about 1224 A.D.	A double Chalukyan temple of great beauty and elaboration.	Said to be in charge of a soldier of Belur.	<i>Were repaired and put in order by Colonel Saxe-Ley in 1896.</i>	.....	.....	.....
1a	<i>Temple at Belur near Halebidu</i>	A Chalukyan temple, with wonderfully elaborate sculptures; built in 1114 A.D.	.....	.....	.....	.....	.....
1a	<i>Chalukyan Temple, called Kuttiswara, at Halebidu, erected in the 12th century.</i>	Covered with sculptures of the the best class of Indian art.	.....	.....	.....	.....	.....
11b	<i>Colossal Jain Statue at Karkala.</i>	This image is 41 feet 5 inches high; date 1423 A.D.	No information	.....	.....	.....	.....

Burma.

Some Principal Ancient and other Native Architectural Buildings in Burma.

Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
11b	<i>Pagoda at Thaton, about 40 miles north of Martaban.</i>	The ruins at Thaton have been described by St. Andrews, St. John, and are very extensive; the principal pagoda is adorned with the most elaborate sculptures; date probably before sixth century.	.....	.....	.....	.....	.....
11b	<i>Ruins and Remains at Prome.</i>	Prome was the religious capital of the Hindustanis in Burma up to 107 A.D., and its ruins require investigation.	.....	.....	.....	.....	.....

No official list yet furnished.

[See Ferguson's *Indian Architecture*.]

	In use	Was repaired in (A.D.)	Has been photographed	
Ib: Shwe-Tsah-Daw in the large Pagoda in the Town of Prome.	Ditto	.....	.....	.....
Ib: Kyah-Chan-Kan Pagoda, Mandalay.	Ditto	.....
Ruins of Pagoda.
IIb: Circular Dagobas	See Colonel Yule's <i>Illustrations to Asia</i> .
IIb: Burmese Monasteries.	See Colonel Sykes' <i>Survey of Burma to Asia</i> .

Nipal. Some Ancient Buildings in Nipal.

Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
Ib	Buddhist Temple of Swayambunath, near Kathmandu.	Carious pile of building; the Chhatra is of an irregular form, with a very exaggerated form of spire. Carious buildings, worthy of preservation.	Used for worship	.....	.....	.....	See drawings in the <i>Hindustan Collection</i> .
Ib	Hindu Temples to Mahadeo and Krishna at Patan.	It is five stories in height, and very Chinese in character.	.....	.....	.....	Have been photographed	Ditto.
Ib	Hindu Bhawan Temple at Bhaktapur.	.....	.....	.....	.....	Ditto	Ditto.

Assam.
Ancient Buildings in Assam.

Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographies.	Drawings or plans.
II a	Temples at Silasagar, Jowga and Gaurigaon, in the Silasagar District.	Reported to be works of art.	.....	.....	.....	.....	.....
II a	Temple on the Bakhami Dhabat, in the Darrang District.	The site is said to be of large size, and carved stones lying about.	.....	.....	.....	.....	A plan has been made by the Road Overseer at Darrang.
II a	Remains of Dimaupur, the capital of the Kachari Kings of Upper Assam in the Naga Hills.	Some remarkable pillars are described as being in the Fort.	.....	.....	.....	.....	.....
II a	A collection of carved Mahabharata and stones at the Kachari, Tezpur, Darrang District.	The carvings are said to have an ancient appearance.	.....	.....	.....	.....	.....
II a	The Deputy Commissioner of Darrang writes of an old temple at Tameng in the sub-division of Mangaldai with stones similar to those in the Kachari compound at Tezpur, also of a fine temple at Singri Hill venerated by the Bhutias, who also worship the Hajo Temple in Kamrup.	.....	.....	.....	.....	.....	.....
II a	Mr. McCabe, Deputy Commissioner of the Naga Hills discovered some stone figures near a brick shrine, near Desput in the Namlur forest (one of Durga and the other of Mahadev).	.....	.....	.....	.....	.....	.....

Madras Presidency.

Some Principal Ancient and other Native Architectural Buildings in the Madras Presidency.

Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photography.	Drawings or plans.
<i>Some 42 remains are noted in an official list published in 1896.</i>							
I a.	Buddhist Tope at Anuradhapura, in the Kistna District.	Remains of a Dagoba and railing; about 400 and 500 A.D.	Custody desirable. Some repairs have been recommended.	.....	.....	See Tree and Serpent Worship, by Ferguson.	See Tree and Serpent Worship, by Ferguson.
I a.	Theravada Pagoda at Mahabalipuram, near Madras, in Chingleput.	Temple of Dravidian architecture; about the 6th century; cut in the rock.	Custody desirable. (Permanent watch or suggested in 1896.)	Preservation has been commenced; a good deal remains to be done.	.....	Photographed by Dr. Hunter, Captain Lyne.	See Ferguson, Colonel Mackenzie.
I b.	Dravidian Temple at Tiruvellar, in Chingleput, 30 miles west of Madras.	A number of temples and shrines enclosed in a court 150 feet by 700 feet.	.....	.....	.....	.....	See Ferguson, and Ram, Raja's Hindu Architecture.
I b.	Dravidian Temple at Chingleput, in Chingleput.	Group of temples as picturesque and good as any elsewhere in the Madras Presidency.	.....	.....	.....	.....	.....
I b.	Temple at Perur in Coimbatore.	Has a fine porch; date about 1750 A.D.; with handsome sculptured pillars.	.....	.....	.....	Has been photographed.	See Ferguson.
II a.	Two Gopuras of a deserted Temple at Tirupitri, on the banks of the River Vennai, District Bellary.	Corred with the most elaborate sculptures.	.....	.....	.....	Have been photographed.	See Ferguson. Details would be valuable.
I a.	Temple of Vishnu at Vinayakur, in the Tanjavur District, Bellary District.	A remarkable run of the Dravidian style erected 1500-1700 A.D.; carved in granite.	.....	Mr. Black, Assistant Engineer, has been at work here during the cold season of 1896.	.....	Has been photographed.	Details would be valuable.
I a.	Temple at Velure, North Arcot.	A fine porch; date about 1550 A.D.; in the Velure Fort; was occupied as a store.	.....	Have been restored and cleared.	.....	.....	See Ferguson.

Madras Presidency—contd.
Principal Ancient and Architectural Buildings, &c.,—contd.

Class.	Name of building or group of buildings.	General character.	Locality.	Preservation.	Restoration.	Photographs.	Drawings or plans.
H a	Rajah Mahal, or Rajah's Palace of Chandrafort, in North Arcot.	Chandrafort is a deserted fortified city; there are several interesting ruins in the fort; among them the Rajah's palace.	.....	In 1877 the sum of Rs. 2,000 was provided for repairs.	.....	None known.	None known.
H a	Dilhi Darwaza at Arcot.	Is a spacious and massive gateway surmounted by a tower, said to have been used by Clive at the time of the defence of Arcot.	.....	In 1877 a small establishment was formed for its repairs.	.....	.....	.....
H b	Temple at Chittambaram, in South Arcot.	A large enclosure of shrines and temples, dating from 10th to the 13th centuries.	.....	Preservation desirable.	.....	Has been photographed.	See Ferguson. Details would be valuable.
H b	Dravidian Pagoda at Tanjore.	Called the Great Pagoda; date about the 14th century.	.....	In charge of the Princess of Tanjore.	.....	Has been photographed.	See Ferguson. Details would be valuable.
H b	Dravidian Temple of Soultamangai, Tanjore.	Date about 14th century; covered with elaborate sculpture.	.....	Ditto.	.....	Ditto.	Details would be valuable.
H b	Gopuram or Porth at Combacorum, in the Tanjore District.	A richly ornamented piece of Dravidian architecture.	.....	.....	.....	Ditto.	Details wanted.
H b	Dravidian Temple at Srirangam, near Trichinopoly. (See Appendix V.)	A very large enclosure of temples; a modern cluster of buildings built within the limits of the 18th century.	Used for sacred purposes; a great resort of pilgrims.	Projects for repairs in hand.	.....	Frequently photographed.	.....
H b	Great Temple at Madura, (See Appendix U.)	.....	In use.	Ditto.	.....	.....	Drawings have been prepared in my office. —H. H. C., 1878.
I a	Trimal Noyakka's Palace at Madura.	Dating from 1672-45 A.D.	.....	Repairs in progress since 1868. The Palace is being converted into district offices.	.....	Has been photographed.	See Ferguson. Details wanted. Mr. Chisholm at Madura has drawings.

Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
1b	<i>Dravidian Temple of Rameswaram in the Island of Pamban, (or Madura, (See Appendix X.)</i>	Has some beautiful corridors; the date of the building is from the 13th to the 16th century.	.....	Has been much deteriorated by centuries of paint. Project for repairs in hand.	.....	.....	Drawings in my Office—H. H. 111, 8-1-02
1b	Pagoda at Samjoli, in the Coimbatore District.	A small ruined pagoda with some fine stone carvings and fresco paintings.	.....	.....	.....	.....	.....
1b	Temple at Timavally.	An enclosure 500 feet by 750 feet.	.....	Preservation desirable.	.....	.....	See Ferguson.
Bombay Presidency.							
Some Principal Ancient and other Native Architectural Buildings in the Bombay Presidency.							
Class.	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
<i>In an official list furnished by Mr. Burgess in 1875 some 270 places of interest are enumerated.</i>							
11a	Portuguese remains at Bassem, Mandapda, Ghod-Bahar, in the Thane district.	These are mostly churches and monastic buildings.	.....	Some remains have been suggested for Museum.	.....	.....	Photographs have been taken of these.
1a	Buddhist relics found at Sopara, Thane district.	Several valuable Buddhist relics were found here in 1882.	.....	Should be relic in.	.....	.....	.....
1a	Cave at Elephanta, Bombay.	Dates from the middle of the eighth century; various Hindu sculptures.	In charge of Executive Engineer, Bombay District.	.....	.....	Has been photographed.	See Burgess.
1a	Chaitya at Karbeli, in the Island of Salsette, Bombay.	A rock-cut Buddhist temple; about 100 B.C., with sculpture and capitals.	Custody desirable.	Fair	.....	.....	.....
1a	Chaitya Cave at Nashik, Bombay.	A rock-cut Buddhist temple; about 100 B.C., with sculpture and capitals.	.....	Fair	.....	Has been photographed.	See Ferguson.
1a	Temple called Ambarsath, near Kulkarni, Bombay.	Dating about 600 A.D.; parts of the sculptures have been made and are fine; though small, it is richly carved.	Custody desirable; requires to be preserved.	.....	.....	.....	See Daniell. Drawings would be valuable.

Bombay Presidency—contd.
Principal Ancient and Architectural Buildings, &c.—contd.

Class	Name of building or group of buildings.	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
H	Siva Temple at Poona, Hinday.	A Hindu rock-cut temple of plain design.	.....	.....	.....	.....	See Daniell.
1a	Chalukya Cave at Keri in the Bhore Ghut.	A handsomely rock-cut temple of B.C.	<i>Repairs in hand.</i>	.....	.....	Has been photographed.	See Ferguson.
1a	Chalukya Cave at Bodha, 11 miles from Keri, in the Bhore Ghut.	A rock-cut temple with sculptured capitals.	In charge of Executive Engineer, Poona District.	—	.....	Ditto	See Burgess and Ferguson.
1a	Chalukya Cave at Bhaga, in the Bhore Ghut.	A cave temple dating before the Christian era; carved out of the rock; no sculpture.	Custody desirable	—	.....	Ditto	Ditto.
1a	Purna Masjid at Bijapur, in the Kaimur's Collectorate.	1551-79 A.D.	<i>The town is in process of being adapted as the headquarters of the Kaimur District.</i>	.....	.....	.....	See Ferguson and A. Cunningham; also Hope's <i>Architecture of Bijapur</i> .
1a	Tombs of Ibrahim at Bijapur, in Kaimur's Collectorate.	1570-1600 A.D.; a very elaborate square building.	Repairs necessary.	.....	.....	.....	See Hope's <i>Architecture of Bijapur</i> .
1a	Tombs of Mahomed at Bijapur, in the Kaimur's Collectorate.	1600-60 A.D.; remarkable for simple grandeur and constructive boldness.		.....	.....	Has been photographed.	
1a	Purna Masjid at Ahmednagar, Bombay.	About 1411 A.D.; a fine building; Saracenic in style.	.....	.....	.....	Ditto	See Hope's <i>Architecture of Ahmednagar</i> ; also
1a	Queen's Mosque at Mirzapur, Ahmednagar Collectorate.	Very fine building; Saracenic in style.		.....	.....	Ditto	
1a	Tombs and Mosque at Sirhind at about 5 miles from Ahmednagar.	1450-51 A.D.; fine building; Saracenic in style.		.....	.....	Ditto	
1a	Tombs of Karabul-Ali, Mirza, near Ahmednagar.	Built in 1400 A.D.; Saracenic in style.		<i>Repairs have been going on since</i>	<i>Repairs recommenced,</i>	Ditto	

Ia	Tomb of Syed Qasim, Ahmedabad.	Built about 1460 A.D. by Mahmud Begurra; Saracenic in style.	1669.	188-89.	Ditto.	Ferguson.
Ia	Tomb of Mahmud Begurra, near Kanva, Ahmedabad.	About 1464 A.D.; Saracenic in style.	.....	.....	Ditto.	.....
Ia	Mosque of Mungfa Khan, Ahmedabad.	Saracenic in style.	.....	.....	Ditto.	.....
Ia	The Jami Masjid Mosque, Ahmedabad.	Ditto.	.....	.....	Ditto.	.....
Ia	Decorated Mosque in the Palace at Ahmedabad (Ushakot).	Beautiful specimen of window tracery in this building.	.....	.....	.....	.....
Ia	Jami Masjid at Gandray, Bombay.	Erected to 1325 A.D.	Information wanted.	Much out of repair.	.....	.....
Ib	Jain Temples at Muddhal in Kanva, Bombay.	The exterior are very wooden in construction, although in stone; the interior columns carved in the most elaborate manner.	Custody desirable.	.....	Has been photographed.	See Hope's <i>Architecture of Kanva and Mysore</i> .
Ib	Jain Stambha, or Pillar at Gurnaherry in Kanva.	A handsome carved stone pillar.	.....	Apparently fair.	Ditto.	.....
Ib	Jain Temples at Girnar near Pithan Somnath, Kathiawar.	Amongst these is the famous Somnath temple.	.....	.....	.....	See Ferguson.
Ib	Jain Temples at the sacred city of Satroniya, near Pajitan in Kathiawar.	Numbers of temples and shrines; some as early as the eleventh century and others as the present century.	A few priests sleep in the temples and keep the place clean.	.....	None.	Ditto.
Ib	Navabha Temple at Gundi, Kathiawar.	Very elaborate Jain temple.	.....	Ruined.	.....	See Ferguson.
Ia	Jami Masjid at Champsanz in Guzerat.	Built by Muhammad Shah in 1261 A.D.; said to be very carefully decorated.	In not used.	Has been injured in many places.	None.	None.
Ib	Tomb of the Nawab of Junaghar in Kathiawar.	A modern building.	.....	.....	Has been photographed.	.....
Ia	Jami Masjid at Broach.	Probably built before Ahmed Shah; built of stone with domes, and is a fine specimen of ancient mosques, constructed out of the materials of overthrown Hindu temples.	Used as a travellers' quarters by Muhammadan mendicants.	Is falling into a dilapidated condition. Repairs wanted.	None.	See Mr. Hope's tomb on <i>Sarad & Broach</i> .

Bombay Presidency—concd.
Principal Ancient and Architectural Buildings, See—concd.

Class	Name of building or group of buildings	General character.	Custody.	Preservation.	Restoration.	Photographs.	Drawings or plans.
H 1	Old Temple at Gop-Kapthlasar.	Singular in style.	.....	Ruined.	.....	.....	See Burgess.
H 2	Brachmanical Temple of Pappasathia at Purodikol or Puttalakul, in Diavani, Bombay.	Date about 200 A.D.; a much sculptured about building.	None known.	A ruin.	.....	Has been photographed.	Idito.
H 3	Dravidian Temple at Padmalakul, in Diavani, Bombay.	Date eighth or ninth century; a rock-cut temple.	Requires custody fully.	Requires preservation.	.....	.....	See Ferguson and Burgess.
H 4	Brachmanical rock-cut Temples at Radrol, in Diavani, Bombay.	There are three caves, interesting for their architectural details and sculptures; 575-700 A.D.	.....	.....	.....	Has been photographed.	See Burgess.
H 5	Decehan or Sone Lamp Post at Utharwar, Bombay.	An elegant stone column.	.....	.....	.....	Has been photographed.	.....
H 6	Palace at Jammagar, Kathiawar.	Elaborate.	.....	.....	.....	.....	See Burgess.
H 7	Jain Chattr at Mundini, Kathiawar.	.....	.....	.....	.....	.....	Idito.
H 8	Jain Temple at Bhadrasar, Kathiawar.	.....	.....	.....	.....	.....	Idito.
H 9	Temple near the Monks of Alora Shastri at Surat.	In the style of the later Mahabudhan; temple at Ahmedabad; windows of perforated stone, and the domed interior of rare beauty.	Is in a dilapidated and filthy state.	.....	.....	None.	None.
H 10	Jain Temple at Kedar, near Bhuj, Kathiawar.	.....	.....	.....	.....	.....	See Burgess.
H 11	Mosque at Dakhole, in the Maragiri Zila.	Worthy of repair and preservation.	Custody desirable.	In charge of Engineer, Rajmahal.	.....	.....	.....
H 12	The Munkha' Mosque at Randedi, Surat.	Apparently a small Jain temple converted into a mosque; famous for its carved wooden pillars.	No information.	.....	.....	None.	None.

H a. Buddhist Caves, Temples, at Karachi, 30 miles south of Sahiwal.	No information.									
H a. Jami Masjid at Karachi.	Built 1570 A.D.; both mosques and minarets are decorated with carvings covered with plaster.	No information.						None.		
H b. Mosques and Tombs at Tatta in Sind (during A. D. 1575-1600), Bombay.	The tomb of Nawab Amir Khan, (640) is of brick, ornamented with beautiful coloured tiles.	In custody of the Muhammadans at Tatta.				Restoration recommended in 1855, by Sir Bartle Peere at a cost of Rs. 5,000; 1412 was actually carried out in 1857.	Has been photo-graphed.	None.		Details would be valuable.
H b. Ancient Gateways at Chabot, Baroda.	Beautiful specimen of Jain architecture of the 10th century.			Much ruined.						
H b. Tomb of Syad Khan, Baroda, 1455 A. D.	Similar to Ahmadabad tombs.							None.		
H b. Lal Shah Bhair, a Masjid in the south-east quarter of Sehwan, in the Karachi District.	Built of first-rate brick; prettily decorated with coloured tiles; built about 1340 A.D.	Occupied by Sayids, and considered very sacred.	No information.					None.		None.
H a. Kausa Kiar Jind Pir at Bahri in an island opposite Sahiwal.	Date 932 A.D.; covered with tiles of all-coloured patterns.	No custody; a guard much wanted.	Preservation necessary.	Impossible.			None.			None.

Appendix B.

List of some Historical British Monuments and Memorials worthy of preservation on account of their public interest.

(Revised.)

Bengal.

1. The Ochterlony Monument on the Calcutta maidan; built in 1825 in honour of Sir David Ochterlony. The column is of plastered brick.
2. Pedestrian statue of Lord William Cavendish Bentinck, Governor General; erected in 1835 in front of the Calcutta Town Hall; bronze.
3. Pedestrian statue of George, Earl of Auckland, Governor General; erected in 1848, inside the Eden Gardens, Calcutta; bronze.
4. Pedestrian statue of Sir William Peel, Calcutta; white marble.
5. Equestrian statue of Henry, Viscount Hardinge, on the Calcutta maidan; bronze.
6. Equestrian statue of Sir James Outram (by Foley, 1874), Calcutta; bronze.
7. Statue of the Marquess of Hastings (in the Dalhousie Institute), Calcutta.
8. Statue of Lord Lawrence, Calcutta.
9. Statue of Lord Mayo, Calcutta.
10. Pedestrian statue of Thomas George, Earl of Northbrook, by Bodim, in front of High Court, Calcutta; erected 1878; bronze.
11. Lady Canning's tomb in St. Paul's Cathedral, Calcutta.
12. Statue of Bishop Heber, by Chantry, in St. Paul's Cathedral, Calcutta.
13. Monument to Earl Elgin in St. Paul's Cathedral, Calcutta, by Gilbert Scott.
14. Pedestrian statue of the Marquess of Wellesley in Government House, Calcutta, by Bacon; marble.
15. Equestrian statue of Charles John, Earl Canning, by Foley; erected 1877 on the Calcutta maidan; bronze.
16. Pedestrian statue of Warren Hastings, by Westmacott, in the Calcutta Town Hall; white marble.
17. Equestrian statue of Lord Napier, facing Prinsep's Ghat, Calcutta.
18. Lady Canning's tomb in Barrackpore Park.
19. Cenotaph in Barrackpore Park, erected by the Earl Minto, containing the following mural tablets: to the memory of officers who fell at the conquest of Java, 1810-12; also to the memory of officers who fell at the conquest of the Isle of France, 1810; and to the memory of the officers who fell at Maharajpore, 1843.
20. Cenotaph close to the Judge's kutcherry at Bankipore, erected in memory of Major Knox, who in 1760 relieved Patna when besieged by the Emperor Shah Alum.
21. Tall stone shaft in Patna City, erected in memory of 48 servants of the East India Company and 100 European soldiers massacred by Mir Kassim Ali, Subadar of Bengal, when the British were marching to the rescue of their countrymen in Patna in 1763. Among the victims were Mr. Ellis (Resident of Patna) and Messrs. Hay and Lushington (Members of Council).
22. Two monuments at Bhagalpur to the memory of Mr. Augustus Cleveland, Collector of Bhagalpur; one of brick, erected by the district landholders, and the second of stone, sent out by the Court of Directors from England.

Bengal—*contd.*

23. A small cross in the disused burial-ground enclosed in the Bhagalpur race-course, erected to the memory of officers and men of Her Majesty's 3rd Buffs, interred in 1828.
24. Monument at Chattra to commemorate some soldiers who fell in combat with mutineers, 1857 (Hazaribagh District).
25. A tomb at Arrah to the memory of soldiers of Her Majesty's 35th Regiment who fell in the Shahabad District on the 23rd April 1858.
26. Three monuments on the west and three monuments on the north side of Khurda to the memory of officers and men who fell during the Khurda rebellion (Puri District, Orissa).
27. Tomb of Mrs. Mary Hastings (wife of Warren Hastings) and her child in the old cemetery of Cossim Bazar (Murshidabad District).

North-Western Provinces.

28. Monument at Aligarh to the memory of officers and men who fell at the taking of Aligarh in 1803.
29. Tomb at Aligarh of Major Robert Nairn, 6th Bengal Cavalry, who fell at the siege of Kutchowra in 1803.
30. Monument at Aligarh to the memory of officers and men who fell during the Mutiny, 1857.
31. Tomb of General Gillespie at Dehra Dun.
32. Two memorial pillars erected to the memory of the officers who fell at the storming of the Kalinga Fort in 1814, Dehra Dun.
33. Monument at Fatehgunj near Bareilly to the memory of the officers and men who fell near Fatehgunj against the Rohillas in 1794, also Tomb of Hafiz Rahmat Khan, leader of the Rohillas, built by the Governor in Council.
34. Tomb of the late Mr. Thomason, Lieutenant-Governor, North-Western Provinces, in the Churchyard of Christ Church, Bareilly.
35. Four masonry Lions on the Ganges Canal at Rurki.
36. Tomb of General Fraser in the Muttra cemetery.
37. Tomb of Lieut. Burlton near the site of the old cemetery at Bulandshahr.
38. Tomb of Lieut. Home in the Bulandshahr cemetery.
39. The memorial cross in memory of those who were murdered in the Mutiny at Shalijahanpur.
40. Tomb over the graves of Captain A. Giffard and Volunteer Trooper A. Curran in the village of Mainmamaha, at Basti.
41. Tomb of Mr. E. F. Venables in the old cemetery at Azimgarh.
42. Tomb of Captain H. H. Jones in the Public Gardens at Azimgarh.
43. A monument at Hallia in Tappa Uprandh in memory of those who fell in the battle of Beharra Churri, A.D. 1811, Mirzapur District.
44. Two graves of Indigo planters, close to Gopiganj, on the grand trunk road, Mirzapur District.
45. Tomb erected to the memory of some British officers killed during the Mutiny at Fatehpur.
46. Tomb to the memory of Colonel Thomas Sydney Powell, Colonel of the 53rd Regiment, at Fatehpur.
47. Monument erected to the memory of the officers and men of General Whitlock's force who fell during the Mutiny, at Banda.
48. A memorial stone in the Alfred Park to the memory of Quarter Master Sergeant R. Watkins, murdered by the mutineers, Allahabad.

North-Western Provinces—*contd.*

49. A stone in the Kydganj cemetery, beneath which were laid the remains of 7 officers of the 6th Native Infantry who were murdered during the Mutiny, Allahabad.
50. A monument in memory of Major Penkney, late Commissioner of Jhansi.
51. Tomb of Lieutenant-Governor the Honourable John Russel Colvin at the Palace of Agra.
52. At Goverdhum a massive monolith bearing an inscription setting forth that Colonel Seymour, C.B., will punish any soldier who shoots game in the neighbourhood.
53. Monument at Aligarh to the memory of Ensign Marsh and others killed on the Agra and Aligarh road in 1857.
54. Tombs at Shewalaghat, Benares, of 3 British officers who were killed in the disturbance of Rajah Cheyt Singh.
55. Memorial cross at Fatehgarh in memory of those who fell during the Mutiny, 1857.
56. Tomb in Cawnpore Memorial Church compound erected to the memory of Major Vibart and 70 officers and men who escaped from the massacre at Cawnpore in June 1857 and were captured and murdered at Sheorajpur.
57. Tomb near the Cawnpore Church erected by the Memorial Church Committee over the remains of those that were first killed in the entrenchment in June 1857.
58. Well in the Memorial Church compound covered with a stone and inscription.
59. Large stone cross at the barracks, Cawnpore, erected over the well in which those that lost their lives in the entrenchment were buried in 1857.
60. Statue (by Marochetti) and enclosure over the well in the Memorial Gardens, Cawnpore.
61. Memorial at Azamgarh erected to the memory of the officers and men who were killed at the battle of Azamgarh.
62. Mausoleum of Lord Cornwallis at Ghazipur by Flaxman.
63. Monuments at Jhansi in memory of those killed in the Mutiny, 1857.
- 63a. Roman Catholic burial ground at Agra.

Oudh.

64. The space in front of the Tarawali Kothi, where two parties of Europeans were murdered in 1857; a memorial has been put up to commemorate these massacres, almost on the spot where they occurred.
65. On left of "Gisainganj" Road, about $\frac{1}{2}$ mile from "Dilkasha," and on this side of bridge, over "Pangri" Nullah—Lieutenant Percy C. Smith, 97th Regiment.
66. About fifty yards on left flank of "Dilkasha" in an enclosure, Major the Honourable Barrington R. Pellew and Ensign L. E. Cooper, 2nd Battalion, Rifle Brigade.
67. In rear of the General's house, Captain Charles William McDonald, 93rd Highlanders; Lieutenant Lowick Emilins Cooper, 2nd Battalion, Rifle Brigade; Lieutenant Charles Warden Sergison, 93rd Highlanders; and Charles Evans, 93rd Band.
68. In the "Belatibagh," Captain H. Hutchinson, 9th Royal Lancers; Sergeant S. Newman, 9th Royal Lancers; and Mr. Henry B. Garvey, Acting Mate, Her Majesty's S.S. *Shannon*.

Oudh—*contd.*

69. In rear of the right flank of "La Martinière"—Captain W. S. R. Hodson, of Hodson's Horse; Captain L. D'Acosta, 56th Native Infantry.
70. Under a tree on the left of the road going from "La Martinière" to "Wingfield Park Bridge"—Lieutenant Augustus Otway Mayne, Bengal Artillery.
71. About fifty yards on the left of "Secundrabagh"—Lieutenant Francis Dobbs, and 5 privates of 1st Madras Fusiliers.
72. Off the road between "Mushidzadi's Tomb" and the Kaiserbagh—Captain T. Clarke, R.E., Lieutenant E. P. Brownlow, R.E., Corporal F. Morgan, Lance-Corporal J. Davies, and 12 Sappers.
73. At "Secunderbagh" Bridge on the left bank of "Gumti"—Lieutenant W. R. Moorsom, 52nd Light Infantry, Deputy Assistant Quarter Master General, 1st Division.
74. About 2½ miles on and close to the left of "Fyzabad" road—Captain W. F. Thynne, 2nd Battalion, Rifle Brigade.
75. About 150 yards off the right of the "Fyzabad" road, at 50 yards beyond the bridge over the "Gokral" Nullah—Charles Sandford, late Captain of the 3rd Bengal Light Cavalry.
76. Old cantonment cemetery, 3 miles on the "Sitapur" road to the right—Lieutenant F. G. MacDonald, Adjutant, 2nd Punjab Cavalry; Lieutenant H. G. Richards, 3rd Battalion, Rifle Brigade; and Lieutenant Robert Daly Syngé, 90th Light Infantry.
77. About 50 yards to the right of the "Sitapur" road at the 4th milestone, the 46th Regiment, Cholera Graveyard—Private W. Aston, 46th Regiment.
78. At the "Mūsabagh"—Captain T. Wale, 1st Sikh Irregular Cavalry.
79. About ½ mile off the "Mallabad" road between it and "Mūsabagh"—Major John Griffiths Price, 2nd Dragoon Guards (Queen's Bays).
80. The 97th Regiment Graveyard on the river road, 1 mile from the Fort, Ramaki Darwaza—Sergeant W. Smith and Sergeant G. Smith, 97th Regiment; Assistant Surgeon W. Dumbreck, 97th Regiment.
81. Steeple monument on the top of "Hazratganj" near "Kaiserbagh"—Sir Mountstuart Jackson, Bart., Captain Patrick Orr, Lieutenant G. J. H. Burns, 1st Bombay European Fusiliers, Sergeant-Major Morton; on other side G. P. Carew, Esq., Mr. Greene, Miss Jackson, and others, victims of 1857.
82. In the "Alambagh"—Major T. Perrin, Lieutenant N. G. J. J. Nunn, and M. Preston, 90th Light Infantry; Lieutenant Dundas W. Gordon, Bengal Artillery; Henry Ayton, 84th Regiment; Major-General Sir H. Havelock.
83. Tomb about 3½ miles off the left side of the "Sitapur" road between the 7th and 8th milestones.
84. Old "Murriam" Cemetery and Roman Catholic Cemetery in rear of the "Passant" (Revenue or Customs) "Kaiserbagh."
85. Two tomb-looking enclosures—one close to the right side of the "Sitapur" road, about the 8th milestone, nearly opposite the Travellers' Bungalow; the other on the Artillery side of the road, running between their lines and the Lancers.
86. Lawrence's tomb—Residency.
87. Cross to those who fell in the defence—Residency.

Oudh—*contd.*

88. Memorial to the faithful sepoy of the Bailey Guard, outside the Bailey Guard.
89. The "Sher Darwaza," where Neill fell.
90. Tomb of Mr. Ravenscroft, murdered at Bhinga, Oudh, 1823.
91. Tomb of the Honourable Adrian Hope, C.B., Lieutenant-Colonel, 93rd Highlanders, Hardoi.
92. Graves of Lieutenants C. Douglas, A. Jennings Bramley, and H. Willoughby at Hardoi.
93. An enclosure at Kusaura containing the graves of two children of W. G. Probyn, C.B., Hardoi District.
94. Grave of Major Robertson at Baraman, Hardoi District.
95. A monument erected in memory of certain victims of the rebellion of 1837 at Kheri.

} Lack
now.

Punjab.

96. Mackeson's Obelisk—Peshawar.
97. Bilaspore monument four or five hundred yards to the East of Ruttem Ghar, to Captain Showers, 1-19th Bengal Native Infantry, killed storming the Malown Heights, 15th April 1845.
98. Also to Lieutenant Lawtis, R.E., rude tomb of stones; a monument was erected to him in the Cathedral Church of Calcutta.
99. Lieutenant Thackery, 26th Native Infantry, killed at the siege of Jeytuk; his tomb on the bank of a tank at Naliun. This monument is a lofty pyramid on a pedestal without any inscription; there are three other graves.
100. Masonry pyramid and inscription to the memory of Colonel Canara, who fell in 1848 while defending his guns against the rebel Sikh army at Harripur.
101. Cemetery at Gujrat in which officers and men killed in that battle are interred.
102. Grave of Lieutenant Boulnois, Bengal Engineers, in a bastion of Fort Michni, assassinated by Mohmuds in 1852.
103. Cross in memory of Sir Donald McLeod at Lahore.
104. In front of the Delhi Church is a massive marble cross, sacred to the memory of those who were massacred in May 1857.
105. The Delhi magazine rendered famous by the intrepid Willoughby.
106. John Nicholson's grave in the cemetery, Delhi, facing the Kashmir Gate.
107. Flag-Staff Tower, Delhi.
108. The Monument on the Ridge, Delhi.
109. Monument and fountain in memory of General John Nicholson, who fell at Delhi, 1857, at Margulla, between Rawalpindi and Attock.
110. Memorial monument of the siege of Delhi, 1857; Delhi.
111. Monuments to the officers of the several Regiments who fell at Ferozeshah in the Ferozpur cemetery.
112. Battle-field monument at Mudki, Ferozpur.
113. Battle-field monument at Ferozeshah.
114. Battle-field monument at Sobraon.
115. Tomb of Sir Henry Durand at Dera Ismail Khan.
116. Monument in the Public Garden, Gurdaspur, to the soldiers killed in the action at Trimin Ghât, 1857.
117. Memorial Irish Cross, Chilianwalla, detailing the names of officers killed in the battle.

Punjab—contd.

- 118. Monument in a garden at Gurdaspur to the soldiers who died of wounds received at Trimin Ghât.
- 119. Tomb of Lord Elgin at Dhurmsalla.
- 120. Monument in memory of those killed at Hissar in 1857.
- 121. Memorial at Montgomery of Leopold Oliver Fitzhardinge Berkely, Extra Assistant Commissioner, killed in 1857.
- 122. Monument over the bodies of officers killed at Chatrian, Sirsa District, 1857.
- 123. Battle-field obelisk at Chilianwallah, and graves of men who fell in 1849.
- 124. Battle-field obelisk at Aliwal, Ludhiana.
- 125. Monument erected in memory of Mr. Vane Agnew and Lieutenant William Anderson, at Multan, in the Fort; also Tablet in the Idgah at Multan to the same.
- 125a. Tomb at Multan of Major Montezambert, 10th Regiment, who fell during the siege. Erected by Lord Dalhousie.

Maisur.

- 126. Equestrian statue of Lieutenant-General Sir Mark Cubbon, Commissioner of Maisur and Curg (by Marochetti), in front of the Maisur Government offices, Bangalore; bronze.
- 127. Cenotaph of the officers who fell at the siege of Bangalore, 1792.
- 128. Cenotaphs at Bangalore to officers and men killed in the campaigns of 1791-92 and 1799.
- 129. Monument at Seringapatam to Richard, Marquess Wellesley, K.P., Governor General of India, erected by Krishna Raja Wadayer, Bahadur, 1804.
- 130. Monument to Josiah Webbe, erected by Purma Diwan at Seringapatam.
- 131. Monument at Sabbal Rani Hill, Seringapatam, to the officers of H.M.'s 12th and 74th Regiments killed or died during the siege of Seringapatam, 1799.
- 132. Tomb of Captain Ouslow Gore, an Engineer Officer who fell at the battle of Arikere in the Manjarabad Taluk, Hassan District, 1800.

Bombay.

- 133. Statue of Sir Charles Forbes.
- 134. Statue of Hon. Mountstuart Elphinstone.
- 135. Statue of Sir John Malcolm.
- 136. Statue of John, Lord Elphinstone.
- 137. Sitting statue of Mr. Stephen Babington.
- 138. Statue of Sir Bartle Frere.
- 139. Sitting statue of Mr. Charles Norris.
- 140. Sitting statue of Sir Jamsetji Jejeebhoy.
- 141. Statue of Lord Cornwallis.
- 142. Sitting statue of the Marquis of Wellesley.
- 143. Sitting statue of Her Majesty Queen Victoria on the Esplanade, Bombay.
- 144. Statue of the Prince of Wales.
- 145. Statue of Prince Albert.
- 146. Statue of the Honourable Jugganath Sunkersett, in the Fort.
- 147. Statue of Sir Jamsetji Jejeebhoy, Bart., Jamsetji Jejeebhoy Hospital, Byculla.
- 148. Memorial marble tablets of the officers and men who fell in the Afghanisthan and Sind campaigns, on the walls of the apse and chancel of St. John's Church at Colaba.

In the Town Hall,
Bombay.

Garden enclosure of the Elphinstone
Circle, Bombay.

Bombay—*contd.*

149. Old Dutch tombs at Ahmedabad.
150. Monument in the wall of the town of Ahmadnuggur, naming those who fell at the storming of the city in 1803.
151. Monument at Koregaum, near Puna, to the 2nd Bombay Grenadiers.
152. Grave in Kanara of Lord St. Maur, son of the Duke of Somerset, killed in 1865 by a bear at Kirwatty, near Yellapur.
153. Grave in Kanara of Lieutenant Carpendale, who died at Yellapur while surveying the Arbyle Ghât Road.
154. Memorial cross at Puna to Lord Frederick FitzClarence.
155. Monument at Kawulkad, Kanara, in memory of Lieutenant John Edgar Leslie, Madras Native Infantry, who died in service on 30th March 1845.
156. Tomb at Murkward, Kanara, in memory of Lieutenant Mortlock.
157. Monuments at Aden over the officers and men who fell at the capture of Aden in 1839.
158. Tomb of John Thackeray, Collector and Political Agent, killed at Kittur in 1824, during the insurrection at Kittur in Dharwar.
159. Wooden cross with metal tablet bearing Latin inscription in the "Mula's Ward" of Surat—marks site of ancient Capuchin Chapel.
160. Oxenden Mausoleum, Surat.
161. Tombs at Surat of Gerald Angier (supposed) Bernard Wyche, F. Breton, H. Gary, and B. Harris, former Presidents and merchants of Surat.
162. Tomb of Van Reede, Dutch President of Surat, and other Dutch tombs of same epoch, near the preceding.
163. Tom Coryat's tomb—old European burial-ground, Swali, near Surat.
164. Vaux's tomb on right bank of Tapti, not far from its mouth—near Surat.
165. Tomb of Brigadier David Wedderburn, killed at siege of Broach, 1772, near North-Western bastion of Fort Broach.
166. Tomb of Captain William Sempil, killed at Broach, 1803, near village of Pejalpur, Broach.
167. Tomb of M. François Montreaux, a Portuguese officer, who seems to have taken part in siege of Broach, 1803, near the preceding.
168. Dutch tombs—about one mile west of Pejalpur, Broach.

Sind.

169. Tomb of Edward Cooke, with peculiar inscription, 1743—Tatta in Sind.
170. Old European burial-ground on Bandar Road, Karachi.
171. Napier Obelisk (1853) in memory of Sir Charles Napier—Napier Mole Road—Karachi.
172. Monument bearing names of officers and men who fell on the battle-field of Mairi, Haiderabad, Sind.
173. Monument—in Government House grounds, Karachi, erected by Sir C. Napier to memory of officers and men, 22nd Regiment, who fell in the Sind campaign.

Rajputana.

174. Bust with inscription at Ajmir of the late Colonel Sutherland.
175. Monument of red sandstone erected to the memory of Lieutenant-Colonel John Ludlow, C.B.—1822, at Barod—Kotah State.
176. Tomb of the late Colonel Dixon in the Beawar cemetery (Ajmir-Merwara).
177. Tomb in the old cemetery, Jaipur, to the memory of Mr. Martin Blake, B.C.S., Assistant to the Governor General, Rajputana, murdered at Jaipur on the 4th June 1835.

Rajputana—*contd.*

178. A large monument at Lahot, 24 miles to the north of Dosa, Jaipur State, erected to the memory of an officer (name unknown) who died there.
179. The Hastings Bridge erected in 1818 by Colonel Tod, 6 miles east of Kotah, in commemoration of the victory over a body of Pindaris.
180. Monument near Mangrol (Kotah State) to Lieutenants Clerk and Read, of the 4th Regiment, Bengal Light Cavalry, killed in a fray with the forces of the Maharao Kishori Singh, 1821.
181. Monument in the Kotah graveyard in memory of Brevet Major C. A. Barton and two sons killed in defending the Residency against mutineers, 1857.

Central Provinces.

182. Monument and tombs in the Sitabuldi Hill Fort to the memory of officers killed at the battle of Sitabuldi in 1817.
183. Grave at Bera Ghat, 9 miles from Jubbulpur, of a gentleman who while in a boat on the Narbudda jumped into the river to save himself from bees and was drowned.
184. Monument at Saugor in memory of General Wallace; General Sir T. Anbury, K.C.B., C. A. Moloney, B.C.S., Agent, Governor General, Saugor and Narbudda Territories; E. W. Cockerell, B.C.S., Assistant to Agent, Governor General, Saugor and Narbudda Territories.
185. Cross at Karinjia, Mandla District, erected in 1867 in memory of missionaries who died there.
186. Graves of officers and men who fell at the siege of Chanda, 1818, at Chanda.
- 186a. Masonry grave at Sahbhhatta in the Patna State, bordering on the Sonpur State, Sambalpur District,—said to be to an officer in command of troops proceeding during the last century from Cuttack to quiet a disturbance in the Bora Sambar Zamindari.
- 186b. Masonry monument at Semrapali, Sarangarh State, Sambalpur District, to A. C. Elliot, who died in 1778 on a Political Mission to the Raja of Nagpur.
- 186c. Tomb at Muvhari, 50 miles east of Nagpur, of Mary, wife of Major Claye Watson.

British Burma.

187. Graves at the Shive-Dagsu Pagoda, Rangoon, of officers and men killed at the storming of the Pagoda in 1852.
188. Graves at the Botatoung Pagoda, Rangoon, of officers and men who fell or died in the second Burmese War, 1852-53.
189. Tombs on the platform of the Shway Dagone Pagoda, Rangoon, of officers killed in the operations, 1852-53.

Hyderabad Deccan.

190. Assaye battle-field monument (43 miles north-east of Aurangabad), 1803.

Assam.

191. Memorial at Cherpa Punji to the memory of David Scott, B.C.S., Agent to the Governor General, who died 20th August 1831.
192. Monument of plastered stone with a tablet at Nongkhlao in the Khasi hills, 35 miles north-west of Shillong, to Lieutenants Bedingfield and Bariton, massacred by Khasias, 1820.
193. Stone cairn at Kohima to the memory of Mr. G. H. Damant, B.C.S., treacherously killed by Nagas, 1879.

Assam.—*contd.*

194. Memorial stone at Khonoma to the memory of Mr. G. H. Damant, B.C.S.
195. Memorial stone at Khonoma to the memory of Major Cock, killed at the attack on Khonoma, 1879.
196. Tomb at Goalpara to Lieutenant Cresswell, died of a wound received in action against freebooters in Kamroop, 1794.

Madras.

197. Equestrian statue of General Neill, 1st Madras Fusiliers, Mount Road; bronze.
198. Monument in the Island at Seringapatam to the memory of Lieutenant-Colonel William Baillie, who was taken prisoner at Perumbakum, 18th September 1780, and died at Seringapatam in November 1782, erected in 1816 by his nephew, Lieutenant-Colonel John Baillie, Resident at Lucknow.
199. Statue of the Rev. Mr. Schwartz, by Flaxman, in the church at the little Fort, Tanjore.
200. Tower on the coast at Saluvanaikpatnam (Tanjore District), erected by the late Rajah of Tanjore to commemorate the battle of Waterloo.
201. Monument on the Red Hills west of Pondicherry to Major Stevens, Chief Engineer, killed in the trenches during the siege of Pondicherry, 1778.
202. Obelisk at Kotta Ruppam, north of Pondicherry, over graves of soldiers killed at the siege of Pondicherry, 1760.
203. Cenotaph at Tirukoilur to the memory of Arthur French, M.C.S., who died at Cuddalore in 1823.
204. Monuments to officers who fell or died of wounds received at Panjalum Kurichi, 1799-81, at Vellaram, Tinnevely District.
205. Equestrian statue of Sir Thomas Munro, once Governor of Madras, middle of Island at Madras; bronze.
206. On the parade-ground facing the Council House at Madras, stone canopy covering a large pedestrian marble statue of the Marquis of Cornwallis on a marble pedestal, decorated with groups of figures in alto-relievo, representing the surrender of the sons and suite of Tippu Sultan.
207. Monument at Patti Konda built in memory of Sir Thomas Munro, erected on the spot where he died of cholera.
208. White marble statue of Sir Thomas Munro—Fort Church, Madras.
209. Cenotaph to the Marquis of Cornwallis, enclosed by an iron railing cast from the cannon taken at the siege of Seringapatam, 1799, by the troops under his command—Mount Road, Madras.
210. Cenotaph to Colonel Dalrymple—Parade-ground, St. Thomas' Mount, Madras.
211. Obelisk in memory of General Sydenham—St. Thomas' Mount, Madras.
212. Granite column to Colonel Noble, C.E., erected by the men of the Horse Artillery, St. Thomas' Mount, Madras.
213. A half-length marble bust (by Chantry) of Colonel Noble, C.B., placed by the officers, Royal Horse Artillery, in the Church, St. Thomas' Mount, Madras.
214. Madras Memorial Hall—erected by public subscription in memory of the Madras Presidency not joining in the Sepoy Mutiny of 1857.
215. "Lal Bagh," Seringapatam, a mausoleum built by Tippu Sultan for his father, and in which he also was buried. The folding-doors, inlaid with ivory, were the gift of Lord Dalhousie, and the mausoleum is supported at Government expense.

Madras.—*contd.*

216. Monuments to Colonel Brown and Captain Hislop, killed in the battle of Pullalore, Conjeveram, 1781.
217. Monument on the Race-course, Guindy, to the memory of Major Donald Mackay, who died in 1783.
218. Cyclone Monument in the Fort at Masulipatam to the memory of those who perished in 1864.

Central India.

219. Tomb on the Battle-field at Maharajpur, Gwalior State—to Lieutenant Bray, Her Majesty's 39th Regiment.
220. Tombs by old Gwalior Cantonment of officers formerly attached to the Residency.
221. Tombs at Mehipur, Western Malwa—Captain Norton, Lieutenants Shanahan and Gom, Rifle Corps, Lieutenant Gibbings, 2nd Battalion, 18th Regiment, erected by the officers of the 3rd Division of the Army of the Deccan, 21st December 1817.
222. A grave on the Battle-field of Mundisore, Western Malwa—name unknown.
223. At Rajgarh, Chhatarpur, Bundelkhand—grave of Colonel Leslie, 1778.
224. At Ajaigarh, Fort Bundelkhand—Tomb of Lieutenant Babington, 2nd Regiment, Native Infantry, 5th August 1813.
225. At Teghara, Siniariya, Punna, Bundelkhand—Tomb of Mr. Murray, Thuggi Department, murdered by thugs.
226. Tombs of General Churchill, C.B., Lieutenant-Colonel Edward Sanders, Bengal Engineers, who fell in battle at Maharajpur, 20 miles north of Gwalior.
227. Tombs four miles to the west of Morar near the Sagar Tal. Lieutenant Robert Vetch, Assistant to the Resident with Scindiah, died 1813 (the tomb out of the perpendicular and dangerous); R. Macaulay, Esq., Surgeon, died 1813. Josiah Stewart, died 1825; Susan Elizabeth Low, died 1831.

Appendix C.

List of some ancient and modern Forts and Citadels in India.

(Revised.)

Punjab.

1. ATTOK—Muhammadan. Akbar, 1583.
2. BALLABGARH—Delhi—Muhammadan.
3. CHARSUDDAH—Peshawar—old Pathan Fort called Balla Hissar, built on the site of Pushkalavati, the ancient capital of Gandhara.
4. DELHI (OLD FORT)—Lalkot, 1052—Hindu.
5. Kali Rai Pithora, 1180, A.D.—Hindu.
6. Siri or Kila-Alai, 1304—Muhammadan.
7. Tughlakabad, 1321—Muhammadan.
8. Adilabad—Muhammadan, 1325.
9. DELHI (MODERN)—Muhammadan.
10. DEPALPUR—Montgomery—early Muhammadan; in ruins.
11. EDWARDESABAD—Bannu—modern, 1848.
12. ISLARGARH—Bahawalpur State—Hindu.
13. JHAZGARH—Rohtak—built by George Thomas.
14. JAITSAR—Sirmur State—Hindu.
15. JAMRUD—Peshawar—Muhammadan. Occupied by the British.
16. KOT KANGRA—early Hindu.
17. KUMLAGARH—Mandi State—Hindu. 1,500 feet above the Beas River.
18. MALAUN—Hindu State—Gurkha. 2,000 feet above the Rivers Gamrata and Gambhar.
19. MALLOT—Salt Range—Old Hindu. Contains a temple in the Kashmir style of architecture. Circuit of fort 8,000 feet.
20. MASTGARH—Bashahr State—Gurkha.
21. MICHNI—Peshawar—British.
22. MOHUR—Bashahr State—Gurkha. Contains a famous Hindu Temple.
23. MULTAN—Muhammadan.
24. NAWAGARH—Bashahr State—Gurkha.
25. PATHANKOT—Gurdaspur—a very ancient Fort. Hindi coins of the 1st Century found in it.
26. PESHAWAR—Fort of Bala Hissar of sun-dried brick—Muhammadan.
27. PHILLAUR—a Fort built by Ranjit Singh.
28. RAMGURH—Hindu—Gurkha.
29. RANIGAT—Yusufzai, Peshawar—early Buddhist, with Græco-Bactrian remains. Strong hill fort.
30. ROHTAS—Jhelum—massive fort built by Shir Shah; covers 260 acres—Muhammadan.
31. SHAHKADAR—Peshawar—Sikh. Now held by the British.
32. SHER SHAH—Multan—River fort on the Chenab—Muhammadan.
33. SHORKOT—North-west of Multan—A very ancient Fort. Greek coins found; also a quantity of moulded bricks.
34. TANK—Dera Ismail Khan—Fort of mud. Sir H. Durand lost his life here.

North-Western Provinces and Oudh.

35. AGRA—Muhammadan. Built by Akbar.
36. ALIGARH—originally Hindu—enlarged by the Mahrattas.

North-Western Provinces and Oudh—*contd.*

37. ALLAHABAD—Muhammadan—Akbar, A.D. 1575.
38. BARANA—65 miles west-south-west of Agra—old Hindu Fort. Added to by Muhammadans and Jats.
39. BARIGARRH—in the Banda District—Fort of Chandel Rajas.
40. BATESWAR—43 miles south-east of Agra—Hindu Fort.
41. BHIND—near Etawah—Hindu Fort.
42. BIJAIGARRH—Mirzapur—Hindu; ruined.
43. CHARKHERI—near Mahoba, Banda—Muhammadan.
44. CHUNAR—Mirzapur—Hindu; used.
45. GARHA—in Sultanpur District, Oudh—formerly Hindu.
46. HATHRAS—Aligarh—Hindu; ruined.
47. JAGNER—Agra—36 miles south-west of Agra, on a hill 400 feet high, covered with remains of temples, &c. Has a gateway dated A.D. 1571 but the fort is Ancient Hindu.
48. JALAON—small Hindu Fort. Remains of fine buildings inside.
49. JAYTPUR—Banda District. Remains of Mahratta Fort, enclosing numerous dressed granite carvings.
50. KALINGAR—Banda—Hindu, 7th Century A.D. Fortifications dismantled A.D. 1866. The site is covered with interesting remains.
51. KASIA—35 miles east of Gorakpur—called Mutha-kuar-ka-kot—Buddhist.
- 51a. MAHOBAB FORT.
52. MARPHU—in the Banda District—Fort of Chandel Rajas.
53. MAUDHA—in the Hamirpur District—Fort of Chandel Rajas.
54. NALAPANI—Delhra Dun—Gurkha, A.D. 1814.
55. NIMSAR—Lucknow—Muhammadan, A.D. 1362. Built on a Hindu foundation.
56. RAGAULI—Banda—Hill Fort, and 1,300 feet above sea—Hindu.
57. RAI BARELI—Muhammadan, 15th Century A.D. Has some handsome tombs and mosques.
58. RAJGHAT—Benares—erected by the British, A.D. 1837.
59. RAMNAGAR—Rohilkhand—old Hindu Fort, with 54 bastions.
60. SHAHJAHANPUR—Muhammadan.
61. SIRAKAT—Kumaun—Hindu. Strong, but without water-supply.
62. UJAIN—near Kashipur in the Moradabad District—Buddhist.

Bengal and Assam.

63. BARABATI—Cuttack—Hindu, 14th Century A.D.; almost ruined.
64. BENUGARRH—Purneah District—Hindu, B.C. 57; ruined.
65. BESARRH—Patna—Buddhist. Large deserted Fort.
66. BIHAR—Gya—Buddhist. Massive walls.
67. CALCUTTA—(Fort William)—British.
68. DURDURIA—Dacca District—Hindu; 2 miles in circuit; contains remains of buildings.
69. GHOLGHAT—Remains of a Portuguese Fort, which grew into Hooghly.
70. JANOGARRH—in Orissa—Buddhist. Asoka Inscriptions.
71. MONGHYR—Muhammadan.
72. RAJAGRIAH—Patna—Ancient Buddhist; in ruins.
73. RAMGARH—South of Hazaribagh—Buddhist, contains an Asoka Inscription.
74. ROHTASGARH—Shahabad—Ancient Hindu; 1,490 feet high, 28 miles in circuit; contains many interesting buildings.
75. GARHGAON—Sibsagar, Assam—Hindu.

Rajputana.

76. AMBER—Jaipur—Hindu.
- 76a. BAYANA—in Khirauli.
77. BHAINSROR—Udaipur, on a rock—Hindu.
78. BHARTPUR—Hindu, A.D. 1733.
79. BHATNAIR—Bikaner—old Hindu.
85. BHAT-KA-DUNGR—a circular aboriginal fort—Jaipur State, 2 miles south-west of Nain.
81. BIKANER—Hindu, $3\frac{1}{2}$ miles circuit. Good condition and massive.
82. CHITTORE—early Rajput.
83. DEOSA—Jaipur State—32 miles east of Jaipur city on the top of a hill—Hindu.
84. DIG—Deeg—Bharatpur—Hindu.
- 84a. JAHANGURH, Khirauli.
85. JAIPUR—Tiger Fort—Hindu.
86. JAISALMER—Hindu; 250 feet high; strong.
87. JODHPUR—Hindu, A.D. 1549.
88. RAJGARH—Uwar State.
89. RANTAMBORE—Jaipur State.
90. TARAGARH—Ajmir—originally Hindu.

Central India.

91. AJAIGARH—Bundelkhand Agency—Fort of Chandel Rajas.
92. BHILSA—Bhopal—Hindu.
93. CHANDERI—Gwalior—ruins; Hindu.
94. GWALIOR—Gwalior—Hindu.
95. IRICH—Central India on the Betwa, north-east of Jhansi, formerly Hindu—captured by Akbar.
96. JAHAR—Gwalior State.
97. JHANSI—Gwalior—Hindu; naturally strong position.
98. LAHAR—Central India between Gwalior and Jalaun—Mahratta.
99. MANIGARH—Bundelkhand Agency—Fort of Chandel Rajas.
100. RAHATGARH—East of Bhopal—formerly Hindu, containing ruins of an extensive Palace.
101. RAISIN—Bhopal—Hindu.
102. UDAIPUR—near Bhilsa—Hindu, Muhammadan.
103. SINDWA—Mahratta, one mile in circuit.
- 103a. SUMPTHER—near Duttiah.

Central Provinces.

104. AJMIRGARH—Mandla—Hill Fort.
105. ASIRGARH—Nimar—Hindu; strong (see Plan, Plate XIX, Cunningham's Vol. IX.)
106. BALLAPUR—Chanda—Hindu.
107. BALOD—Raipur—Hindu.
108. CHAMAGARH—Narsingpur District—Hindu; ruined.
109. DEORI—Saugor—covering 3 acres—Hindu—1713; 1,700 feet high; occupied by Police &c.
110. DHAMONI—Saugor—Hindu, 1600; 52 acres.

Central Provinces—*contd.*

111. DONGARGARH—Raipur—Hindu; 4 miles circuit; no remains of buildings.
112. GARHA—Near Jubbulpore—Fort of Chandel Rajas.
113. GARHAKOTA—Sagar—Hindu, 1629.
114. HATTA—North of Damoh—formerly Hindu.
115. KOSGAIN—Bilaspur—Hindu.
116. LAPHAGARH—Bilaspur District—Hindu; part of the Fort remains in good preservation.
117. MANDLA—Hindu—see Grant's Central Provinces Gazetteer.
118. PAUNI—South-East of Nagpur—Hindu.
119. RAHABGARH—Sagar—Hindu; large Fort with many buildings.
120. RAIPUR—Hindu, A.D. 1460; a mile in circuit.
121. SAGAR—Mahratta Fort—covering 6 acres.
122. SINGAURGARH—Jubbulpore, on a high hill—Hindu, A.D. 1540; remains of the Fort are extensive.
123. TEPAGARH—Chanda—Hindu; 2,000 feet above the sea.
124. UMRER—Nagpur—Hindu; partly ruined.

Bombay Presidency.

125. AHMADNAGAR—Deccan—Muhammadian, A.D. 1559; $1\frac{1}{2}$ miles in circuit.
126. BIJAPUR—Kaladgi—Muhammadian.
127. BUKKUR—Sind—Muhammadian.
128. CHAMPANER—Panch Mahals—Large and strong; Hindu.
129. DAMAN—Portuguese Settlement—In Guzerat, two Forts: "Damao Grande," "Damao Piquent."
130. DHARWAR—Hindu, A.D. 1403; falling into ruins.
131. DHULIA—Khandesh—Hindu.
132. DIU—Portuguese, A.D. 1545; in good preservation.
133. DOHAD—Panch Mahals—Muhammadian, 15th Century; strongly built.
134. HARISCHANDRAGARH—Ahmednagar; 3,869 feet above the sea.
135. IMAMGARH—Khairpur State, Sind. Blown up by Sir C. Napier.
136. JUNNAR—Poona—Muhammadian, A.D. 1436.
137. PURUNDHAR—Poona, on a hill, 4,472 feet above sea—Hindu; afterwards occupied by Mahrattas.
138. RAIGARH—Thana—Hindu; eventually taken by Mahrattas.
139. RAIRI—Ratnagiri—Mahratta, A.D. 1662.
140. PAROLA—Khandesh—Hindu.
141. PARTABGAH—Satara—Mahratta.
142. PAWANGARH—Panch Mahals, on a hill, 2,800 feet above the sea—Jain; afterwards occupied by Muhammadans, who erected buildings.
143. PAWANGARH—Kolhapur—Hill Fort—Hindu.
144. SATARA—On a hill—Mahratta.
145. SEHWAN—Karachi—Sind, old fort, said to be of Alexander the Great.
146. SHIVNER—Poona—Mahratta.
147. SHOLAPUR—Muhammadian, A.D. 1345.
148. SONGARH—Baroda—Hindu.
149. SURAT—Built A.D. 1373, rebuilt A.D. 1546.
150. SINHGARH—Poona—Hindu.

Berars.

151. BALAPUR—Muhammadan, A.D. 1257; large and strong.
152. GAWILGARH—Ellichpur—Muhammadan, A.D. 1420. Fort dismantled A.D. 1853.
153. NARNALA—Ellichpur, on a hill, 3,161 feet above sea; extensive fortifications—Jain; afterwards added to by Muhammadans; interesting ruined buildings in the Central Fort.

Haiderabad.

154. DAULATABAD—On a rock—Hindu (Deogiri); large Fortress.
155. GOLCONDA—Fort used as the Nizam's Treasury.
156. NALDRUG—1½ miles in circuit, on a rock 200 feet high—Early Hindu.

Maisur.

157. BADIHAL—Chitaldrug—Hindu, 16th Century A.D.
158. BANGALORE—Hindu, A.D. 1537.
159. CHIKBALLAPUR—Kolar—Hindu, A.D. 1479.
160. CHITALDRUG—Nagar—Hindu, A.D. 1508.
161. DODLALBAPUR—Bangalore—Hindu, 14th Century A.D. In the Fort are the remains of several fine buildings and tanks.
162. MAISUR—Hindu.
163. NANDIDRUG—Kolar, on a hill, 4,810 feet above the sea—Hindu; added to by Muhammadans.
164. SAVANDRUG—Bangalore—Hindu.
165. SERINGAPATAM—Hindu, A.D. 1454; existing fortification constructed by Tipu Sultan.
166. SIRA—Tumkur—Muhammadan.

Madras.

167. ARCOT—Hindu—Now almost ruined.
168. ARIA KUSSUM—Near Pondicherry—Hindu.
169. ARNI—North Arcot—Hindu; in ruins.
170. ATUR—Salem.
171. AMBERDRUG—North Arcot, Madras.
172. BELLARY—Hindu, 15th Century A.D.; strong.
173. BOBBILY—Vizagapatam—Hindu.
174. CANNANORE—Malabar—Hindu.
175. CHAITPET—South Arcot District—Hindu.
176. CHANDRAGIRI—North Arcot—Hindu, A.D. 1510.
177. CHINGLEPUT—Hindu, 16th Century A.D.
178. CHETVAI—Malabar—Dutch, A.D. 1717.
179. COCHIN—Malabar—First European Fort in India—Portuguese, A.D. 1503; now ruined and occupied by a light-house.
180. COVELONG—Chingleput—Muhammadan, A.D. 1745; blown up in A.D. 1752 by Clive.
181. CUDDALORE—South Arcot—Muhammadan; in ruins.
182. FORT ST. DAVID—South Arcot, 17th Century A.D. Parts in good preservation; is a landmark for mariners.
183. DEVIKOTTA—Tanjore on the coast at the mouth of the Coleroon River. An early settlement of the Company; ruined.

Madras—*contd.*

184. DHARAPURAM—Coimbatore. Fort dismantled in A.D. 1792.
185. DINDIGAL—Madura, on a rock, 1,223 feet high—Hindu. Was occupied by the British until A.D. 1860; great natural strength.
186. GANDIKOT—Cuddapah District, 1,670 feet high—Hindu, A.D. 1589.
187. GANJAM—Company's Fort, A.D. 1768.
188. GOOTY—Bellary—Mahratta, 16th Century A.D.
189. GURRAM KONDA—Cuddapah—Hindu.
190. GINGI—South Arcot—Hindu, A.D. 1442. Several fine buildings in the Fort.
191. KANYAGIRI—Nellore—Hindu, 13th Century A.D.; on a hill 1,500 feet above the sea. There is an ancient temple here.
192. KARANGULI—Chingleput.
193. FORT ST. GEORGE—British, A.D. 1609.
194. PALGHAT—Malabar—Hindu.
195. PENNAKONDA—Bellary—Hindu; afterwards occupied by Muhammadans who left many buildings.
196. PERAMAKAL—South Arcot—Hindu; on a hill 370 feet high.
197. RAIDRUG—Bellary—Hindu.
198. TANJORE—Hindu—Occupied by Mahrattas.
199. SANKARIDRUG—Salem—Hindu; very strong.
200. SATYAMANGALAM—Coimbatore—Hindu.
201. TELLICHERI—Malabar—Hindu; used as a jail.
202. TIAJAR—South Arcot—Old Hindu.
203. TRANQUEBAR—Tanjore—Built by the Danes, A.D. 1624.
204. TRIVANDRUM—Travancore—Hindu; full of quaint wooden buildings.
205. VELLORE—North Arcot—Hindu; 1,500 feet; strong. Has a beautiful temple inside.
206. VINUKUNDA—Kistna—Old Hindu.

Appendix D.

Catalogue of works of Reference bearing on Indian and Oriental Architecture, Art, and Archaeology.

(Revised.)

(I)

Catalogue of Books, &c., bearing on Indian Art.

- ALEXANDER (JAMES EDWARD).**—Travels from India to England, comprehending a visit to the Burma Empire, and a journey through Persia, Asia Minor, European Turkey, etc., in the years 1825-26. Illustrated with maps and plates.—*4to*: London, 1827.
- ANNESLEY (GEORGE VISCOUNT VALENTIA).**—Voyages and Travels to India, Ceylon, the Red Sea, Abyssinia, and Egypt, in the years 1802-06. By George Viscount Valentia. Plates and maps.—*3 vols.*, *4to*: London, 1809.
- ATKINSON (E. T.).**—Statistical, Descriptive, and Historical Accounts of the North-Western Provinces.—*Vols. 1 to IV*, and *vol. X, North-Western Provinces Government Press, Allahabad, 1874*.
- ATKINSON (JAMES).**—Sketches in Afghanistan, by James Atkinson, Esq. [lithographed plates by Louis and Charles Haghe].—*Folio*: London, n. d., 1842.
- ATHANASIUS NITIKINS.**—Travels in the Deccan, 1470. Translated by R. M. Mayors, Esq., Hakluyt Society.
- BELNOS (MRS. S. C.).**—The Sundhya; or the Daily Prayers of the Brahmins. Illustrated in a Series of Original Drawings from nature, demonstrating their attitudes and different signs and figures performed by them during the Ceremonies of their morning Devotions: and likewise their Poojas, etc. In 24 (coloured) plates, by Mrs. S. C. Belnos.—*Imp. folio*: London, 1851.
- BELNOS (MRS. S. C.).**—Twenty-four plates illustrative of Hindu and European Manners in Bengal. Drawn on stone by A. Colin, from sketches by Mrs. Belnos (text in English and French).—*Folio*: London, n. d.
- BIDDULPH (J.), MAJOR.**—Tribes of the Hindu-Koosh.—*1 vol.*—*Office of Superintendent of Government Printing, Calcutta, 1880*.
- BIRD (JAMES).**—Historical Researches on the Origin and Principles of the Buddha and Jaina Religions, illustrated with descriptive account of the Sculptures in the Caves of Western India, with Translations of the Inscriptions from those of Kanari, Karli, Ajanta, Ellora, Nasik, &c., which indicate their connexion with the Coins and Topes of the Punjab and Afghanistan. 53 plates.—*Folio*: Bombay, 1847.
- BIRDWOOD (GEORGE C. M., C.S.I., M.D., now SIR G.).**—The Industrial Arts of India. With map and woodcuts. Published for the Committee of Council on Education.—*2 vols.*, *large cr. 8vo*: Chapman & Hall, London, 1880.
- BLAGDON (FRANCIS WILLIAM).**—A brief History of Ancient and Modern India, from the Earliest Periods of Antiquity to the termination of the late Maharratta War.—*Obl. folio*: London, 1805.

- BRECKS (JAMES WILKINSON).—An Account of the Primitive Tribes and Monuments of the Nilgiris. By the late J. W. Brecks; edited by his widow.—4to: London, 1873.
- BROUGHTON (THOMAS DUER).—The Costume, Character, Manners, Domestic Habits, and Religious Ceremonies of the Mahrattas. With 10 coloured engravings, from drawings by a native Artist.—4to: London, 1817.
- BUCHANAN (DR. FRANCIS).—A Journey from Madras through the countries of Mysore, Canara and Malabar, performed under the orders of the Most Noble the Marquis of Wellesley, Governor General of India, for the express purpose of investigating the state of Agriculture, Arts, and Commerce; the Religion, Manners, and Customs; the History, Natural and Civil, and Antiquities, in the Dominions of the Raja of Mysore, and the countries acquired by the Honourable East Indian Company, in the late and former wars, from Tippoo Sultan. By Francis Buchanan, M.D. Illustrated by a map and numerous other engravings.—3 vols., 4to:—London, 1807.
- BURGESS (JAMES).—Archæological Survey of Western India, 1874. Belgaum and Kaladgi Districts.—W. Allen and Co., London, 1874. Buddhist Caves at Junnar.—Government Press, Bombay, 1875. Provincial Lists of Architectural and other Archæological Remains, Bombay, Sind, Berar, Central Provinces, and Haiderabad.—Government Press, Bombay, 1875. Remains at Gumli, Gop, and in Kachh.—Government Press, Bombay, 1875. Antiquities at Dabhoi, Ahmedabad, Thaa, Junagadh, Girnar and Dhank.—Government Press, Bombay, 1876. Kathiawad and Kachh.—W. Allen and Co., London, 1876. Translations of Inscriptions in the Belgaum and Kaladgi Districts. (J. F. Fleet, B.C.S.)—Government Press, Bombay, 1877. List of remains in Ahmednagar, Nasik, Puna, and Kaladgi.—Government Press, Bombay, 1877. Khandesh.—Government Press, Bombay, 1878. Bidar and Aurnugabad.—W. Allen and Co., London, 1879. Kachh.—Government Press, Bombay, 1879. Kurrachee, Hyderabad, and Shikarpur in Sind.—Government Press, Bombay, 1879. Bauddha Rock Temples of Ajanta.—Government Press, Bombay, 1881. Cave Temple Inscriptions.—Government Press, Bombay.
- BURGESS (JAMES).—Archæological Survey of Southern India, 1882. Amravati Stupa.—Government Press, Madras.
- BURGESS AND FERGUSON.—The Cave Temples of India.—London, 1880.
- BURMESE WAR, THE.—(Eighteen coloured views taken at and near Rangoon, by Lieutenant Joseph Moore, 89th Regiment; and six coloured engravings illustrative of the combined operations of the Forces in the Burman Empire, 1824 and 1825. Painted by T. Stothard, R.A., from original sketches by Captain Marryat, R.N.)—Obl. folio: London, 1826.
- BURNES (LIEUTENANT ALEXANDER).—Travels in Bokhara; being the account of a journey from India to Cabool, Tartary, and Persia; also the narrative of a voyage on the Indus from the sea to Lahore, with presents from the King of Great Britain, performed under the orders of the Supreme Government of India, in the years 1831, 1832, and 1833.—3 vols., roy. 8vo: London, 1834.
- CALDECOTT (JOHN).—Description of an Observatory established at Trevandrum by His Highness the Raja of Travancore.—4to: Madras, 1837; London, 1839.
- CLARK (MRS. H.).—Summer Scenes in Kashmir. Drawn on stone by J. Needham, from sketches by Mrs. H. Clark (12 lithographs).—Imp. folio: London, 1858.

- COLE (HENRY HARDY).—Illustrations of Ancient Buildings in Kashmir, prepared under the authority of the Secretary of State for India in Council, from photographs, plans, and drawings taken by order of the Government of India. By Henry Hardy Cole, Lieutenant, R.E., etc.—*Folio: W. Allen & Co., London, 1870.*
- COLE (HENRY HARDY).—The Architecture of Ancient Delhi, especially the Buildings around the Kutub Minar, by Henry Hardy Cole, Lieutenant, R.E., etc.—*Folio: The Arundel Society, London, 1872.*
- COLE (HENRY HARDY).—Illustrations of Buildings near Muttra and Agra, showing the mixed Hindu-Mahomedan style of Upper India, prepared at the India Museum under the authority of the Secretary of State in Council, from photographs, plans, and drawings taken by order of the Government of India by Henry Hardy Cole, Lieutenant, R.E.—*Folio: W. Allen & Co., London, 1873.*
- COLE (HENRY HARDY).—Catalogue of the Objects of Indian Art exhibited in the South Kensington Museum, compiled for the Science and Art Department by H. H. Cole, Lieutenant, R.E. Illustrated by woodcuts and a map of India showing the localities of various art industries.—*8vo: Chapman and Hall, London, 1874.*
- COLE (HENRY HARDY).—Agra Exhibition Catalogue.—*Thomason College Press, Roorkee, 1867.*
- COLE (HENRY HARDY).—First Report of the Curator of Ancient Monuments in India for 1881-82.—*Government Central Branch Press, Simla, 1882.*
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- COLE (HENRY HARDY).—Fifty-one Photographic Illustrations taken by order of the Government of India, of some selected objects shown at the third exhibition of Native Industrial Art, opened at Simla by His Excellency the Viceroy, 24th September, 1881.—*Woodbury Permanent Photographic Printing Company, 157, Great Portland Street, London.*
- CORDNER (JAMES).—A Description of Ceylon, containing an Account of the Country, Inhabitants, and Natural Productions; with narratives of a tour round the Island in 1800, the Campaign in Candy in 1803, and a journey to Ramistoram in 1804. Illustrated by 25 engravings from original drawings.—*2 vols., 4to: London, 1807.*
- COSTUMES.—A collection of fifty-nine original coloured drawings of Indian costumes.—*4to.*
- COSTUMES, Indian.—Fifty-three original coloured drawings of Indian costumes.—*8vo.*
- CUNNINGHAM (ALEXANDER).—An Essay on the Arian Order of Architecture as exhibited in the Temples of Kashmir, by Alexander Cunningham. [Plates.] *8vo: Calcutta, 1848.*
- CUNNINGHAM (ALEXANDER).—The Bhilsa Topes; or Buddhist Monuments of Central India, comprising a brief historical sketch of the rise, progress, and decline of Buddhism, with an account of the opening and examination of the various groups of Topes around Bhilsa. By Brevet-Major Alexander Cunningham. Illustrated with thirty-three plates.—*8vo: 1854.*
- CUNNINGHAM (ALEXANDER).—The Ancient Geography of India. I.—The Buddhist Period, including the campaigns of Alexander and the travels of Hwen Thsang. With 13 maps.—*Royal 8vo: London, 1871.*

CUNNINGHAM (ALEXANDER).—The Stupa of Bharhut or Buddhist Monument ornamented with numerous sculptures illustrative of Buddhist legend and history in the third century B.C. Published by order of the Secretary of State for India. With 57 plates—*4to*: London, W. H. Allen & Co., &c., 1879.

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(a)—Notice of some counterfeit Bactrian coins—page 393.

(b)—Second Notice of some forged coins of the Bactrian and Indo-Scythians—page 1217.

(c)—Notes on Captain Hay's Bactrian coins—page 531.

(d)—Description of some new Bactrian coins—1 plate—page 867.

II.—Volume X, 1841. Description of some Ancient Gems and Seals from Bactria, the Punjab, and India.

III.—Volume XI, 1842. Second Notice of some new Bactrian coins—page 130.

IV.—Volume XIV, 1845. Notice of some unpublished coins of the Indo-Scythians—1 plate—page 430.

V.—Volume XVII, 1848. Correspondence of the Commissioners deputed to the Tibetan Frontiers.

VI.—Volume XXIII, 1854. Coins of Indian Buddhist Satraps with Greek Inscriptions—page 679.

VII.—Volume XXXII, 1863. Remarks on the Bactro-Pali Inscription from Tarrili—page 139.

VIII.—Volume XXXII, 1863. Notes on the Bactro-Pali Inscription from Tarrili—page 422.

IX.—Volume XXXIII, 1864. Notes on the Bactro-Pali Inscription from Tarrili—page 35.

X.—Volume XXXIII, 1864. Remarks on the date of the Pehewa Inscription of Raja Bhoja—page 223.

XI.—Volume XXXIV, 1865. Coins of the nine Nagas and of two other dynasties of Marwar and Gwalior—page 1.

XII.—Volume for 1881. Relics from Ancient Persia in gold, silver, and copper.

XIII.—Volume for 1883. Second Notice of Relics from Ancient Persia in gold, silver, and copper.

CUNNINGHAM (ALEXANDER).—Notices of, in the Numismatic Chronicle of London—

Volume VI, 1843. The Ancient Coinage of Kashmir.

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Volume for 1867. Coin of the Indian Prince Sophytes, a contemporary of Alexander the Great.

CUNNINGHAM (ALEXANDER).—Notes on the Mathura Inscriptions translated by Professor Dawson—*Royal Asiatic Society's Journal*, 1871, vol. V.

CUNNINGHAM (ALEXANDER).—Ladakh, Physical, Statistical and Historical, with notes of the surrounding countries.—*Imp. 8vo*: London, 1854.

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- CUNNINGHAM (J. D.).—Notes on the Antiquities of Bhopal, 1847. J. B. A. S., Volume XVI. Inscription from the Vijaya Mandir at Udaipur. J. B. A. S., Volume XVII, 1848, on the Lingam at Bhojpur (Bhopal), J. B. A. S., Volume XVII, 1848.
- DANIELL (T. and W.).—*Antiquities and Views in India, from the drawings of Thomas Daniell.* 143 engravings (one wanting).—*Large folio: London, 1879.*
- DANIELL (THOMAS and WILLIAM).—*A Picturesque Voyage to India, by the way of China*, by Thomas Daniell, R.A., and William Daniell, A.R.A.—*Obt. 4to: London, 1810.*
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Appendix E.

Great Buddhist Tope at Sanchi, Bhopal State, Central India.

(N.B.—The Illustrations are from photographs, printed by Heliogravure.)

1. The Great Tope at Sanchi, so well known in the scientific world, through the writings of General Cunningham and Mr. J. Fergusson,¹ was first discovered by Captain Fell in 1819 and excavated in a most destructive manner in 1822 by amateur archaeologists. (Mr. H. Maddock, afterwards Sir Herbert Maddock, was at the time Resident at Bhopal.)
2. Captain J. D. Cunningham, when Political Agent at Bhopal, noticed these antiquities in a paper communicated to the Bengal Asiatic Society in 1847. Major H. Durand (afterwards Sir H. Durand) made drawings of various portions of the Sanchi Gates in 1850-53. But the more detailed discoveries of General Cunningham and Lieutenant (now General) Maisey in 1851 (when they also opened the topes around Bhilsa) are described in the "Bhilsa Topes," published by General Cunningham in 1854.
3. No relics were found in the Great Tope in 1851; the southern and western gates were fallen, the pieces lay scattered on the ground, and a recommendation is recorded in the above-mentioned work for their removal to the British Museum, "where they would form the most striking objects in a Hall of Indian Antiquities." Nothing was, however, done on account of the great difficulty and expense of transporting such large masses of stone over a rough and hilly country to the seaboard.
4. In May 1868 Major Willoughby Osborne, Political Agent in Bhopal, informed the Government of India that the Begum of Bhopal had been requested to present one of the Sanchi gates to the Emperor of the French, to be erected in Paris, but that she desired to know whether the British Government would accept the gate in question for the British Museum. The Government of India in the Foreign Department then wrote to the authorities in Central India, asking that no removal of any portion of the Sanchi remains might be permitted, and stating that casts of the more interesting portions would be procured and copies presented to the French Government.
5. I was accordingly deputed in 1868 to undertake the casting operations, and in 1869 made a full-size model of the eastern gateway of the Great Tope, as well as portions of the sculptures of the three other gateways. Copies of these casts may be seen in Paris and in London and Edinburgh. Casts of some of the sculptured panels are in the Imperial Museum, Calcutta.
6. Early in 1880 Major Prideaux, Political Agent, Bhopal, submitted a recommendation through Sir Henry Daly, then Agent to the Governor General in Central India, to clear the vegetation at Sanchi and to re-erect the fallen gateways. Mr. Bernard, Secretary to the Government of India in the Home Department, invited my opinion as to the feasibility of the proposal, to which I replied by strongly supporting it and by forwarding drawings, showing how the gates should be restored.
7. I visited Sanchi on the 27th November 1880, and reported on the state of the tope (see page clxi, Report of the Curator of Ancient Monuments in India for 1881-82). A detailed survey was also made, showing the exact condition of

¹ The Bhilsa Topes, by Brevet Major Cunningham, London, Smith, Elder & Co., 1854. Tree and Serpent Worship, by J. Fergusson, London, India Office, 1868, 2nd edition, 1873. Picturesque Illustrations of Ancient Architecture in Hindustan, by J. Fergusson, London, Hogarth, 1847.

the remains and what was required to be done. (See plan, page ci of the report for 1882-83.)

PLATE No. 1.—Great Tope at Sanchi. Filling in of the Breach 1881.

8. In March 1881, Mr. Mears, Superintendent of Public Works at Sehore, was deputed by the Political Agent of Bhopal to Sanchi. The Supreme Government furnished a sum of ₹2,000 for preliminary operations, and jungle was removed from the several ruins on the Sanchi Hill, the carved stone fragments were collected, the great breach made in 1822 repaired, creepers removed from the face of the mound, and the shaft that had been sunk in the tope filled in. A series of photographs, showing these operations, was taken, one of which is reproduced in the Plate.

9. After personally inspecting the Sanchi buildings in 1882 and seeing the results of Mr. Mears' work, I addressed the following instructions to Major Keith, who had been appointed my Assistant for Central India:—

"Your attention is directed to the following points in respect of the work at Sanchi.

"The first works to be attended to are the re-erection of the fallen gates, *i.e.*, the western and southern gates of the Great Tope, and repairs to the smaller gateway close by. Arrangements for these should take precedence of all other works. * * * I am disposed to postpone doing anything to the surface of the great hemispherical dome of the tope; the renovated portion shows signs of settling down, and during this, pointing the masonry joints would be useless. Moreover, the dome was originally plastered over, as may be seen in certain parts, and, after the railing has been replaced on the summit, it will be time to consider what is best to be done with the dome surface.

"The upper railing and toe of the tope should, as far as possible, be re-erected. An approach path should be made up the side of the hill, and steps cut in the rock were necessary. The causeway to the small tope on the west should also be improved by cutting steps, &c.

"A good deal remains to be done in jungle-clearing, and all the buildings and remains on the hill should be completely freed from creepers and trees. The tree near the northern gate should be felled. * * * * * Mischievous chipping of carvings still goes on and can only be prevented by erecting a wall around the area covered by buildings. * * * * * The small tope to the west should also be so protected, and gates under lock and key be provided at each place, so that the straying of cattle and trespass by idlers and mischievous persons may be prevented. * * * * * I think a good deal may be done to the railing round the Great Tope by straightening the piers and holding erect by iron bars let into the plinth of the tope. A recent earthquake has caused a serious crack right across the bottom of the right pier of the northern gateway.

"Fortunately the crack is nearly in a horizontal plane, but it would, I think, be well to tie the top of the two piers by iron bars to the tope itself, and thus lessen the danger of falling forwards, should Sanchi be again visited by an earthquake.

"The space between the railing and the tope is paved with large radiating slabs of stone, which should be laid bare and the covering earth all removed. The Buddhist figures should, as far as possible, be replaced in their positions opposite the gateways. The steps recently built to the top of the plinth have a number of carved stones, which belong to the upper railing, perhaps, and which should be removed. Fergusson's and Cunningham's illustrations show a double flight of stairs at the south gate, and these stairs should be restored. The small tope to the west might hereafter be repaired by filling in the hole and repairing the dome.

"The sculptures of the gateways of the Great Tope and of the small gateway near, also of the railing of the small tope to the west, should be thoroughly cleaned. All carved fragments, the original portion of which cannot be identified, should be carefully collected together.

"The work of re-erecting the gateways is of paramount importance. * * * * *

10. Again visiting Sanchi on the 12th—14th March, I was most satisfied with what had been done. The progress made, under no common difficulties seemed to me most creditable to Major Keith and Mr. Lewis, the engineer placed at my disposal by Colonel Thomason. A complete transformation had taken place. The whole of the jungle had been removed from the Great Tope, the ground round it had been partially cleared and sloped, so as to prevent waterlogging, the processional path between the railing and plinth of the mound had been partly freed of debris and earth, the stone pavement laid bare, and,

several fragments of sculpture recovered during the process of clearing. The figures of Buddha were in process of re-erection in their respective places against the plinth of the tope opposite each of the four gateways. The great Asoka railing, which had fallen to ruin between the north and west gates, between the west and south gates, and at the east entrance, had been straightened and secured. The northern gate, rendered dangerous by the crack across the right pillar, had been secured. The eastern gateway had also been secured; the southern and western gates were in process of erection. The smaller gate had been re-built. Many of the sculptures had been cleaned, greatly to the advantage of the scenes, which were scarcely intelligible for lichen and coatings of plaster. Owing to the eradication of jungle the outline and position of the various buildings on the Sanchi Hill are now evident. The approach road on the north side of the hill had been opened out and restored, and the ancient causeway, leading from the small tope on the west, improved and stepped. The retaining wall to the east of the Great Tope has been partially re-built, and the temples, Chaitya Hall and Vihara, cleared of debris. Two large statues of porters, or Gwapals, found in clearing the ground had been erected to the north of the Great Tope.

PLATES Nos. 2-5.—General Views of the Great Tope at Sanchi, showing Repairs, 1883.

PLATE No. 6.—Southern Gateway, Rebuilt, 1883.	Front View.
PLATE No. 7.—	Ditto
PLATE No. 8.—Western Gateway, Rebuilt, 1883.	Back View.
PLATE No. 9.—	Ditto
PLATE No. 10.—Small Gateway, Repaired, 1883.	Front View.
PLATE No. 11.—	Ditto
	Back View.

11. Before Major Keith and Mr. Lewis left Sanchi, in April 1883, the fallen gates had been completely re-erected. The illustrations show what has been effected for the grant made by the Supreme Government.

12. The heavy part of the work is done, but the following remains to be finished :—

Great Tope.

1. Complete the sloping off of the ground all round.
2. Completely eradicate all roots of trees or creepers.
3. Rebuild the plinth which bulges dangerously near the south gate.
4. Secure the surface masonry of the tope by filling in the joints and pointing.
5. Rebuild the railing on the summit of the mound.
6. Complete the cleaning of all sculptures.

Small Tope to the West.

7. Fill in the breach.
8. Secure surface masonry of the mound.
9. Clear the ground of rubbish and trees.
10. Secure the railings.
11. Clean up the processional path.
12. Clean all carvings.
13. Wall round the small Tope.

General.

14. Build a wall round the area covered by the Great Tope, Vihara, and Chaitya (clear of all the ancient foundations of buildings, and on the slopes of the hill, so that the view of the Tope may not be obstructed.)
15. Complete small repairs to buildings to secure them against rain.
16. Put up stone slabs with inscriptions giving name and date of each structure and when repaired.

These operations are now in progress by Mr. A. Mears, whom Colonel Kincaid, Political Agent of Bhopal, has deputed to Sanchi.

13. The Sanchi Stupas, or Topes, and their sculptures, have been illustrated and described more than any other monument of Indian antiquity. An elaborate notice of them would be out of place here, and I merely repeat what General Cunningham and Mr. Fergusson have written. The following brief summary will, however, show the value of this unique historical building.

14. General Cunningham assumes the dates to be as follows:—

Tope, B.C. 500—300.

Railing, B.C. 250.

Gates, about the Christian Era.

15. The tope is elliptical in plan, measuring at the base 118 feet by 125 feet. Its present height above ground is about 55 feet, the railing is also elliptical in plan, measuring 137 by 150 feet. There are four gates, at the north, south, east, and west, giving entrance to the processional path between the tope and railing. The tope is faced with stone, the railing composed of uprights and cross-bars of stone, inscribed with the names of donors. The four gates or torans are alike in construction, consisting of two pillars, about 10 feet from centre to centre and 2 feet square in section, for a height of nearly 15 feet from the ground. The superstructure consists of capitals about 6 feet high, supporting three cross lintels, measuring about 22 feet from end to end. The total height of each gate without the upper row of statues and symbols measures about 33 feet.

16. The architectural embellishments of these curious gates are of three kinds—

I.—Detached statuettes and sculptured symbols.

II.—Sculptured capitals, caps, and bars.

III.—Bas-reliefs of historical and religious meaning.

17. A large number of the detached sculptures have disappeared, but it is evident from those that remain, as well as from the slots which held those missing, that all the openings between the cross lintels were filled. Each upper rail was crowned by a central symbol of the wheel, flanked by statuettes of porters holding chauris, trisal emblems and winged lions or elephants. Men on horseback and riding elephants, dancing women, tigers and lions, filled the spaces between the upright bars of the cross lintels. The capitals of each of the pillars were flanked by brackets, representing dancing women under trees.

18. The sculptures of the capitals are:—

Northern and eastern gates.—Elephants and riders.

Southern gate.—Lions.

Western gate.—Dwarfs.

The block caps of each gate represent crouched animals and riders placed back to back (like the capitals at Persepolis), elephants, horses, winged lions, tigers, bullocks, dromedaries, goats, deers and horned griffins with wings.

The upright bars of the cross rails are variously carved with conventional flowers and emblems.

19. The bas-reliefs covering the pillars and cross-lintels represent scenes described at length by General Cunningham and Mr. Fergusson.

The subjects are generally as follow:—

- I.—The dream and conception of Maya, the mother of Buddha.
- II.—Prince Siddartha's trial of the bow.
- III.—Prince Siddartha's life, Palace scenes, love scenes, social life.
- IV.—Prince Siddartha witnessing the four predictive signs.
- V.—Prince Siddartha's departure from Kapila.
- VI.—Buddha's visit to Uruvilwa-Kasyapa.
- VII.—Boat scene and Buddha's Nirvana.
- VIII.—Worship of tope, trees, symbols.
- IX.—Worship of trees, by animals.
- X.—Siege of a city and relic capture.
- XI.—Relic processions.
- XII.—Triumphal processions.
- XIII.—Besides these historical records there are panels of flowers, animals, and garlands, treated in a conventional manner, showing Greek and Persian origin.

20. As regards dress, it is noticeable that the women are represented naked; a simple girdle of beads or jewels round the loins is in many cases the only covering. The hair is plaited down the back in a most elaborate fashion. They wear jewellery, such as earrings, necklets, and bangles for both arms and ankles. The men are generally draped below the waist and sometimes about the shoulders with the right arm left bare. Their turbans are elaborately tied and sometimes jewelled.

21. In one sculpture, representing the worship of a tope, the men are evidently strangers, apparently from the north, and are clad like the inhabitants of the Himalayas.

22. The arms represented include spears, bows, swords, battle-axes, and shields. Chariots are shown drawn by four horses abreast, and by one or more pairs. Elephants are furnished with handsome trappings, howdahs, and bells, as they are at the present day. Horses are depicted with head-plumes, and harnessed much as now, both for riding and driving. We see women drawing water, husking and winnowing corn, making chappatties in the primitive method still practised in India. Ascetics are shown hewing wood with axes and using the bangly. A boat is represented, sewn together with hemp or bark, precisely as in many parts of India at the present day. Beds, like the ordinary charpoy, ornamental seats or thrones and footstools are used.

23. Of musical instruments, one may observe the drum, long horns (like those blown now-a-days in temples), flutes, guitars, harps, and the double Roman pipe.

24. Banners appear with diagonal stripes like the British Union Jack; garlands and emblems upheld by long poles, and umbrellas of State are carried in procession.

25. The Buddhist sculptures of Gandhara found on the frontiers of Afghanistan are of about the same period as the Sanchi bas-reliefs. In them we see the effects of the Greek and Persian artistic influence, which filtered throughout India. Although more refined in execution and design, and more classical in style, they give us no such varied pictures of manners and customs of India, eighteen hundred years ago, as we have here.

Appendix F.

Gwalior.

(The Illustrations are from Photographs reproduced by Heliogravure.)

1. Until recently Gwalior was an out-of-the-way city, the old mail road between Agra and Bombay passed at a distance from the fortress, which was rarely seen except by those whose duties located them at Morar or by an occasional traveller. The railway, bringing Gwalior within four hours' journey from Agra, tends to a greater influx of visitors and to a greater interest in and knowledge of the rare antiquities of the fortress and surroundings. These became ruined from age, neglect, warfare, and military occupation, but I regret to record that travellers removed stone carvings, pieces of coloured tile-work, and other fragmentary relics, whilst a few years ago whole columns were taken to adorn gardens in Morar, and stones found their way to places even beyond. At the time of my visit in November 1880 the late Colonel Willoughby Osborne, Resident at Gwalior, was interesting himself in the preservation of antiquities. Major (then Captain) Keith, an officer of the Royal Scots quartered in the fort, had, with the aid of a committee composed of Colonel Osborne, General Gordon, commanding at Morar, and Major Crowdy, R.E., Executive Engineer, and a grant of $\text{Rs. } 1,000$ from Cantonment Funds, succeeded in rescuing the fine temple known as the Teli-ka-mandir from ill-treatment as a soldiers' coffee-shop, also in collecting some of the scattered sculptures.

2. I recommended Colonel Osborne to continue such work and to ask the Agent to the Governor General in Central India to apply to the Supreme Government for Major Keith's services as well as for a grant of $\text{Rs. } 5,000$ for the following works:—

- (1) Rescue of carved pillars and stone fragments from the debris surrounding so many of the monumental buildings of the fort.
- (2) The collection of these carved stones at the Teli-ka-mandir.
- (3) Cleaning the beautiful stone carvings of the temples called the two Sas Bahu and the Teli-ka-mandir, the removal from them of the plaster put on by the Muhammadans, and the cutting away of destructive vegetation.
- (4) The removal of the coats of whitewash from the carved trellis and masonry of the courts in the Man Mandir Palace.

3. The appointment of Major Keith and a grant of $\text{Rs. } 5,000$ having been sanctioned by the Government of India, work commenced, and that officer has been engaged at various seasons on it up to the end of 1883.

4. I visited Gwalior in July 1881, and found the cleaning of the sculptures in the temples to have produced the most satisfactory results. I reported accordingly, and made some suggestions to Sir Lepel Griffin, who, as Agent to the Governor General, has taken practical interest in monumental preservation in Central India. I again went to Gwalior in March 1882. The courts of the Man Mandir Palace had been evacuated by the Commissariat, and cleaning, removal of whitewash, removal of modern partitions, and general repairs had progressed satisfactorily. The Teli-ka-mandir and two Sas Bahu Temples were still in hand, and repairs progressing to their roofs and towers. Approaches had been made to some of the Jaina caves in the face of the rock outside the fort,

and Major Keith was busy collecting and arranging fragments of sculpture in the enclosure around the Teli-ka-mandir.

5. In May 1882 His Highness the Maharajah Scindia contributed Rs. 4,000 for repairs, this sum being supplemented by a grant of Rs. 2,500 from Imperial funds. Colonel Bannerman and Colonel Berkeley, who have successively been Political Residents at Gwalior, as well as Generals Gordon and Dunham Massey, commanding at Morar, took much interest in Major Keith's work, and did what they could to promote it.

6. The following may be consulted for information about the Gwalior antiquities:—

Vol. II of the Archaeological Survey of India, by Major-General Cunningham; Mr. James Fergusson's History of Indian and Eastern Architecture; Monsieur Rousselet's India and its Native Princes, and Major Keith's Report on the preservation of Gwalior Monuments (obtainable from the Superintendent of Government Printing in Calcutta).

I will therefore confine myself to describing the accompanying plates.

PLATE No. 1.—Jain Statues.

7. The statues represented in the plate are those on the south-east face of the fortress and excavated in the steep cliff below its walls. All the Jain rock sculptures of Gwalior were mutilated by Baber in A.D. 1527, only 60 years after they were made. They are unique in Northern India for gigantic size and curious as showing how the primitive custom of rock excavation was handed down to mediæval times. The south-east group is by far the largest and most important of all those cut in the Gwalior rock. Although the excavation here depicted is incomplete, the figures themselves were perfect before Baber's time. Their ornaments and canopies are still of the most elaborate designs.

PLATE No. 2.—Palace, Fort Gwalior.

8. This is one of the most remarkable Hindu palaces extant in India, and was commenced by Raja Man Singh between A.D. 1486 and 1516. The Gwalior Fortress situated on a steeply scarped elongated hill runs north and south: one mile and three-quarters long, and of a width varying from 600 to 2,800 feet. The old city of Gwalior lies at the foot of the hill to the north, Scindia's modern city, the Lashkar, being to the south at a distance of about a mile.

9. The palace stands on the east face of the fort 300 feet above the plain. It enjoys a commanding view of the country and is a conspicuous object for miles. The east face of the Man Mandir shown in the plate is 300 feet long by about 80 feet in height, broken at intervals by six massive round towers with domes.

10. The entire front, with its successive additions by Vicramaditya, Jahangir, and Shahjahan, is not included in the view, but the more picturesque and earlier portions of the palace are shown, commencing on the left with the Hathyar Paur on Elephant Gate connected with the façade of the buildings in which Raja Man Singh resided.

11. The courts of the latter were recently occupied as Commissariat stores, but are now cleared, repaired, and cleaned, so that their singular architecture can be admired and studied. Drawings of the latter have been prepared in my office as well as elevations of the south and east façades of the palace, drawn to

a scale of four feet to the inch, and coloured to show the various ornamental bands and niches of tile-work. The heliogravure presents a good idea of the outline of the building, but it is not possible to give a correct impression without the aid of coloured plates. The tile-work is still perfect on portions of the walls and very brilliant with designs of plantain leaves, figures, animals, and bands of ornament in red, blue, yellow, and green. A good deal of the glazed enamel has however become detached.

12. The architecture, which in the walls of the Man Mandir is purely Hindu and, in its domes, of Moslem origin, supplies an early instance of the endeavour to blend the two styles—later on accomplished with so much success in the Emperor Akbar's buildings.

13. Baber visited Gwalior in 1527 A.D. He describes the domes as having been covered with plates of copper gilt. He also states that the front of the palace was originally covered with stucco, which, as General Cunningham observes, has fortunately fallen off and left the whole front of the fine natural tint of the light-colour Gwalior sandstone.

14. Although much has been done to repair the interior of the palace, more is necessary to secure the south and east fronts from falling into greater dilapidation. If *restoration* be avoided, this can be done at a moderate cost; it being merely necessary to strengthen and tie those portions that are out of plumb or insecure, and to prevent rain and vegetation from doing mischief to the walls and roofs.

PLATE No. 3.—Interior of the larger Sas Bahu Temple.

15. There are two temples called "Sas Bahu"—the larger built in the shape of a cross 100 feet by 63 feet; the entrance is to the north and the sanctum to the south. The whole is greatly ruined, probably the result of the Muhammadan occupation of the fort in the thirteenth and fourteenth centuries. The tower of the sanctum is entirely gone and the superstructure of the central hall much damaged. But in spite of dilapidation the fine appearance of the original structure is not difficult to picture. The building dates from the early part of the eleventh century. Unlike most temples of its class and period the Porch is provided with two stories. In other respects—in the form of the columns, their bases and caps—in the domes of horizontal courses and treatment of the roof, the temple resembles those at Chittore, at Khajuraho, at Udaipur, and at Nagda. The appearance of Brahminical sculptures shows it to have been used by Hindus, but this is no proof that it was unused by Jains, as sculptures of both sects occur in the same building, as for instance in the Jain Tower and Jain Temple [the latter called the Sanga Chauri] at Chittore.

16. The temple was occupied by the Muhammadans, the Hindus excluded, and the sculptures partly mutilated and partly covered with stucco. Major Keith has removed the chuna and whitewash, the beautiful carvings being now revealed. He also made the roof weather-tight and strengthened the exterior masonry. General Cunningham had in 1844 propped some of the cracked beams, repaired the broken plinth, and added a flight of steps to the entrance.

PLATE No. 4.—Jama Masjid, Gwalior.

17. The Jama Masjid is below the northern end of the Gwalior Hill near the Alamgiri Gate. It is built of light-coloured sandstone and a favourable specimen of late Mogul architecture. The date, according to Sir William Sleeman, is A.D. 1665. The Muhammadans tried to raise subscriptions for its repair, but failed.

PLATE No. 5.—Modern Mausoleum.

18. The Chattris of the Scindias in the new town are of solid construction and beautiful design. The example illustrated unites an unusual simplicity of outline with great elaboration of detail. Excepting some of the buildings at Udaipur in Rajputana, this is one of the most successful modern princely buildings I know in India. Unfortunately it is thought necessary to periodically whitewash the walls, and the sharp outline of the sculptures is disappearing.

PLATE No. 6.—Shop Front, Lashkar—Gwalior.

19. Many of the shops in the principal street of the Lashkar are decorated with projecting balconies of carved stone pillars and screen work. Although whitewashed like everything else, the houses are most picturesque and pleasing in appearance. Such architecture is capable of application to modern Indian bazaars, and furnishes models for the various municipalities that are now trying to introduce improvements throughout the Empire.

Appendix G.

Chittorgarh in Meywar-Rajputana.

(The Illustrations are from Photographs reproduced by Heliogravure.)

1. Chittore is over 60 miles north-east of Udaipur. It was little known to Europeans, being in the heart of Rajputana, until the Malwa branch of the Rajputana-Malwa Railway brought it within twelve hours of Ajmer.¹ The station is about half a mile from the present town, beyond which towers the ancient fortress on a hill 400 feet high and three miles long by half a mile wide. The ascent is a mile to the upper gate with a slope of about one in fifteen.

2. Bappa, the ancestor of the present Meywar Rana, established himself at Chittore in A.D. 728.

3. The hill is enclosed by a fortified wall and covered with the remains of palaces, temples, and tanks. A description of Chittore, in the *Koman Rasa*, or story of Rawat Khoman, written in the ninth century A.D., runs as follows:—

"Chitterkote is the chief among the 84 castles renowned for strength; the hill on which it stands rising out of the level plain beneath, the Tilac on the forehead of Awini (the earth). It is within the grasp of no foe, nor can the vassals of its chief know the sentiment of fear."
* * "Its towers of defence are planted on the rock, nor can their inmates even in sleep know alarm. Its kotars (granaries) are well filled, and its reservoirs, fountains, and wells are overflowing."
* * "There are 84 huzars, many schools for children, and colleges for every kind of learning; many scribes of the Bhasur tribe, and the 18 varieties of artisans."²

4. The Moslem invaders of India made an attack on the fortress as early as A.D. 836, but the first sack of the stronghold took place about 1303 A.D. under Ala-ud-din Khilji. To commemorate a brilliant victory over Mahmud of Malwa, the Rana Khambo erected the great tower in Chittore, and from the commencement of that prince's prosperous reign (A.D. 1440) much attention was bestowed on the architecture of the country. Bahadur Shah of Gujerat sacked Chittore for the second time in A.D. 1533, and 35 years later the third sack was conducted by Akbar.³ Since then the buildings have been left un-repaired and the capital moved to Udaipur.

5. Besides the two towers there are some 30 tanks and wells in the fortress ten principal temples as well as numerous palaces. The whole area needs careful investigation and survey, more specially as the Maharana of Udaipur has commenced to repair the various buildings in which he may well take a pride.

¹ Bishop Heber in February 1825 paid the fortress a visit "which," he writes, "was a great favour as it is a thing of which they are very jealous and which probably not ten Europeans had seen out of all the number who have visited and lived in India."

² Sir Thomas Roe passed it in 1615 A.D., on his way up country, but does not seem to have been admitted to the fortress.

³ See page 602, vol. II. Tod's *Rajasthan*.

⁴ We are told in Tod's *Rajasthan* (page 276, vol. I.) that the temples and palaces were dilapidated, and to complete the humiliation of the Rajput city, Akbar "bereft her of all the symbols of regality; the Nakaras (or grand kettle-drums) whose resonant tones proclaimed for miles around the entrance and exit of her princes, the candelabras from the shrine of the 'great author' who gave Bappa Rawal with the sword with which he conquered Chittore, and in mockery of her misery her portals, to adorn his projected capital Akberabad." A pair of doors known as the Chittore gates may still be seen in the Agni Palace. I was told by the blinders at Chittore that the great drums and lamps went to Khoja Syed's Tomb at Ajmer, where Akbar built a mosque. The nakar khana or band house of Khoja Syed's Tomb still contains two huge drums presented by Akbar, also a gong, a portion of the spoils of Chittore, whilst the actual tomb of the saint has a pair of sandalwood doors taken from the fortress.

PLATE No. 1.—Jain Tower of Sri Allat. View from the South.

6. Major-General Cunningham, Director General of the Archaeological Survey in India, in 1871 unearthed some Jain statues at Muttra, which were ascertained to date from the time of Kanishka (i. e., A.D. 85 to 120), and these appear to be the earliest traces of Jainism yet discovered. Jain architecture attained great perfection between 1000—1200 A.D. at Mount Abu, at Girnar, and elsewhere, but the singular point about the style is that so little is known of the process of its development.

7. The tower of Sri Allat supplies a very important intermediate example dating A.D. 806, and is dedicated to Adnath, whose representations are repeated many hundred times outside the building. The height of the structure is 76 feet, but was probably 80 feet to the original apex of the roof. A central staircase winds up a square shaft through six stories to the lantern on the top. Sculptures and mouldings cover the exterior from the base to the summit, rendering the appearance most elaborate and picturesque. Many of the architectural forms and details are found to be repeated in Indian temples of a later date. Its preservation is therefore important; not only is its architecture reflected in the monuments of Chittorgarh itself, but it supplies important evidence of how the Jain style grew anterior to its period of greatest perfection.

8. I have had this building carefully surveyed, and reported in detail on the repairs necessary.

PLATE No. 2.—Tower of Victory built by the Rana Khambo.

PLATE No. 3.— Ditto ditto. Detail of Lower Portion.

9. The most prominent monument of the hill is the Pillar of Victory erected by the Rana Khambo in commemoration of the defeat and capture of Mahmud of Malwa in A.D. 1439.

10. It is said to have cost 90 lakhs of rupees, and was constructed between A.D. 1442 and 1449. Built throughout of stone, and measuring 30 feet wide at the base by nearly 130 feet in height, the tower is in itself a striking object, whilst its position on the summit of the Chittore Hill gives it the advantages of command over the surrounding country. The style is Jain and resembles that of the smaller Jain tower which as far as is known is the earliest monument of the Chittore fortress.

11. In the older example the height is under 80 feet and the central staircase winds up from base to summit through a central shaft divided up into six floors.

12. In the present case there is a height of nearly 130 feet (the present dome obscures the actual termination of the original roof), and the staircase passes up the tower through nine floors. The architect was not content with a single central well. The second, third, fourth, fifth, sixth, and seventh floors have each a square compartment in the middle surrounded by a gallery up both of which the stairs wind alternately.

13. Each story is lighted by trellis windows, and the angles and recesses not intersected by steps are utilised for sculptured statues and ornaments. The exterior surface of the tower is broken up into nine principal divisions, each furnished with its windows, balustrades, and eaves or chujjas and emphasized by columns, pilasters, and numberless horizontal bands or cornices. The whole is covered with sculptures, and most of the gods of Hindu mythology are represented wherever niche or panel occurs. The present dome is a modern

repair. Mr. Fergusson saw the tower in 1839 with its original Jain roof.

PLATE No. 4.—Ahar-ki-Darwaza.

14. Near the Tower of Victory stands a fine stone temple, the Mōkul-jī-ka-mandir—dating from the 15th century A.D. The exterior is adorned with elaborate and interesting friezes of figures which appear to depict real scenes in history. North and east of this temple are two gate buildings, that to the east, here represented, opens into the street of the Sindhi Bazar, and the mud houses which encroach on it right and left might with great advantage be removed. The architecture of the gate is purely Hindu; the delicate carvings are applied with taste, but vegetation is destroying the fabric, which, unless speedily strengthened, will fall to the ground.

Appendix H.

Palace at Udaipur in Meywar, Rajputana.

(The Illustrations are from Photographs reproduced by Heliogravure.)

1. When Udaipur was founded by the Rana Udaï Singh in A.D. 1558, he conceived the idea of creating an artificial lake, on the margin of which to build a palace. The Arwali mountains, the great feature of Meywar, surround the locality, and by raising a dyke or bund across the beautiful valley, streams were dammed up to form the Pachola Sagar. The city, which can be now reached from the Rajputana-Malwa Railway at Nimbahera, a distance of 64 miles, is situated on an elevated strip of ground parallel to the shore of the lake, and crowning the ridge stands the palace over 100 feet in height.

2. The pile of stone and marble grown by the various additions of successive Ranas presents a most picturesque and imposing appearance.

3. In the midst of the lake which the palace overlooks are two island residences, the Jagmandir and Jagnavas, and but for their domes, kiosques, and palms, the view reminds one rather of the English lakes than of an eastern valley.

4. The Udaipur Palace consists of a group of buildings dating from A.D. 1594 to the present day. The first gateway leading from the city was built by Partab Singh in 1594 A.D.—a plain unpretending-looking Hindu structure surrounded by crenelated walls; beyond this is the Tirpolia or Triple doorway of graceful Hindu-Sarascenic architecture built by Sangram Singh, in 1711 A.D.; to the left or west of the intervening courtyard are a set of 8 Torans or triumphal arches erected by successive Maharanas.

5. Passing under the Tirpolia one comes in view of the picturesque western façade of the palace. The Bari Mahal or great court is nearest on the right or east. It was completed in A.D. 1597 by Amara Singh I; consists of five stories, and has a handsome superstructure of marble fancifully wrought into corbelled windows and trellis screens. The superstructure or upper story rests on a marble string-course carved with bas-reliefs of elephants. The palace is confronted by a long terrace and colonnade where the Rana's elephants are kept.

6. Leaving this, one passes a plain and lofty building surmounted by domes and cupolas, used by the zenana. Further on to the south is a picturesque palace of Karan Singh's time A.D. 1616, and beyond this again the Maharana's modern residence.

7. The upper story of the Bari Mahal contains an open garden called the Amar Belas, completed by Amara Singh II in A.D. 1711. It is surrounded by marble trellis, kiosques, and pavilions with handsome doors ornamented with ivory (see Plates 3 and 4). In the centre of the court is a tank encased with huge slabs of marble.

8. The Bari Mahal possesses a number of courts, galleries, and halls built in excellent native styles, but it is curious here and there to see evidences of European influence. One room dating A.D. 1716 is lined with Dutch tiles representing windmills and skating scenes of Holland, Biblical subjects, &c.; another dating A.D. 1857 has glazed niches in the walls filled with English China figures and Bohemian glass. Another room is faced entirely with Chinese plates of the old Willow pattern.

PLATE No. 1.—Jalnavas in the Palace.

9. The Jalnavas, or "fountain palace," was built in A.D. 1828 by Jawan Singh close to the margin of the lake, and forms a ghât for landing or embarkation. The columns are square and of a plain Hindu design, the wall at the back being decorated with coloured glass mosaic representing figures of women and the Rajput peacock. Water channels and fountains edge the wall and render the pavilion cool and pleasant.

PLATE No. 2.—Coloured Glass Mosaic in the Palace.

10. Glass mosaics are in great favour at Udaipur and occur in the island palaces of Jagmandir and Jagnavas, both of which were commenced about A.D. 1623. A court of the latter has recently been decorated in a very tasteful manner with this work.

11. Shah Jahan built a Shish Mahal in the Agra Fort (1637 A.D.), and very beautiful examples of mirror mosaics exist in the palace of the Jaipur Rajas at Amber dating probably from 1630 A.D.

12. The work became popular with the Sikhs at Lahore and Amritsar, but lost some of its earlier refinement. The best glass mosaics I know are at Udaipur and Amber. The designs at the former place are of great delicacy, and besides floral patterns include representations of figures in brilliant colouring.

13. The mirror throne in the plate is very rich and sparkling. Situated in the centre of the western front of the palace it overlooks a court to the east, the walls of which are adorned with peacocks in niches rendered in glass mosaic.

PLATES Nos. 3 & 4.—Wooden Doors, of the Bari Mahal, inlaid with Ivory.**PLATE No. 5.—Wood and Ivory Door in the Chandre Mahal.**

14. The upper story of the Bari Mahal, which, as previously stated, is an open court containing a garden, has several handsome wooden doors, two of which are here represented. An apartment in another part of the palace, called the Chandre Mahal, has also some well designed doors, one of which is the subject of the third plate. In describing the doors of the Darshani gate at Amritsar, I have endeavoured to show how Indian marquetry developed from the famous Somnath gates, of the early part of the 11th century A.D. down to the work of to-day. The old Punjab cities possess a variety of beautiful mediæval doors carved in wood, and at Conjeeveram in the south the Brahmin quarters are full of wooden portals of excellent execution and design. It is by the study of such examples throughout India from north to south that the art of the wood-carver and in-layer can be regenerated.

15. The doors here represented are in disrepair and require to be taken care of, or they will fall to pieces.

Appendix I.

Illustrations of Græco-Buddhist sculptures from the Yusufzai District.

(The Plates are from Photographs reproduced by Heliogravure.)

1. With the permission and assistance of the Punjab Government, I directed some excavations on the Swat and Buner frontiers, in the Yusufzai District, during the winters of 1883 and 1884. A large number of Græco-Buddhist sculptures were discovered from 12 ancient monastic sites, and having been arranged in groups, according to the buildings they belonged to, the Lieutenant-Governor, Sir C. Aitchison, presented them to the Museums at Lahore, Calcutta, Madras, Bombay, and Rangoon. They have all been photographed, and a selection of the best subjects, together with illustrations, furnished by the Director-General of the Archaeological Survey of India, of previous explorations will be published in a work under preparation by General Cunningham and me, to be called the "Buddhist Sculptures of Gandhara."

2. Before describing the sculptures here illustrated, I venture to make some general remarks on the singular character of their architecture and ornament. The first impression given by a mere glance at any of the carvings is the strong influence of Greek art; but when we come to carefully analyse the whole subject, the composing elements are curiously mixed. General Cunningham has described at some length the Græco-Bactrian architecture of Yusufzai, and those who desire to form their own conclusions would do well to study the Archaeological Survey Reports, Vol. II and Vol. V; also to read Mr. Fergusson's chapter on the Gandhara Monasteries in his "History of Indian and Eastern Architecture." Of this, however, it is quite certain that Alexander's invasion left a strong impression on the art of Northern India. The use of Greek forms of ornament became general in the Cabul Valley, in the Upper Punjab, and in Kashmir. The Corinthian order reproduced itself all over Yusufzai, the Doric order in Kashmir, and the Ionic order at Taxila (Shahderi, between Attock and Rawalpindi). But Alexander had conquered Persia before he penetrated to the Indus, and he seems to have confirmed in India a knowledge of the palaces at Persepolis. The Indo-Persian capital is frequently found in Yusufzai; it occurs also in Madras, at Amtavati, in Bombay, in the Bedsa and Karli caves, in Bengal, at Buddha Gaya, and in Central India, at Bhurhut and at Sanchi. Whether Persian and Greek art had made itself felt in India before Alexander's time is hard to say, as our previous knowledge of the country is at present so meagre. The Fort at Ranigat in Yusufzai has all the appearance of great antiquity; the walls are very massive, and constructed of large blocks of hewn granite laid carefully as headers and stretchers. Many of the stones are over 6 feet in length, and mortar of very great hardness is used; but instead of being pointed, the joints are filled with thin slabs of stone or slate. The main entrance is a pointed archway cut in the horizontal layers of stone walling, and zigzagging into the body of the stronghold, probably joins a similar passage on the west. The arch, instead of finishing in a point, has a rectangular termination similar to the section of an ancient Etruscan tomb at Core¹ dating from many centuries B.C. It might be hastily concluded that the pointed archway at Ranigat is Saracenic, but the interior of the Fort has

¹ See Vol. I, Fergusson's History of Architecture in all countries, page 264.

remains of several Buddhist Topes with sculptures in stone and plaster resembling those ordinarily found elsewhere in Yusufzai, and dating from about the commencement of the Christian era. I obtained a collection of 9 pieces during my visits. The Ranigat gateway, therefore, completely proves that pointed archways were in use in Northern India before the birth of the Prophet. The antiquity of Ranigat is a subject for speculation. General Cunningham endeavours to identify it with the Fortress of Aornos which Alexander captured about 326 B.C., and if this identity could be established its architecture would supply an important sequence to the very early Pelasgic art of Greece. A gateway at Thoricus in Greece, dating from about 1000 B.C., resembles the Ranigat entrance in the curvilinear form of doorway, as well as in the horizontal construction. Another circumstance connected with the Græco-Bactrian architecture of Yusufzai is the appearance of hemispherical domes built on the principle of horizontal layers. The dome of the Treasury of Atreus at Mycenæ, which is a very antique example of Pelasgic art, is noticed by Mr. Fergusson as that adopted by the Jaina architects in India; and the Treasury or Granary which I discovered among the Sanghao ruins seems to me to form a most important link between the Pelasgic Treasuries at Mycenæ and Jaina architecture, and shows that the mode of raising a semicircular dome on a square chamber by corbelling out the corners of the square and forming an octagon found its way to India before either the Jains had commenced their wonderful system of constructing domes over pillars, or the Muhammadans had introduced their elaborate methods of doming over square chambers. I know of no other example of a square chamber, corbelled out at the corners and domed over, that is not Muhammadan. It has generally been assumed that a construction such as appears in the Sanghao granary is to be traced to Muhammadan architects. Here, at all events, is an example which completely upsets the theory. The masonry resembles that used in all the Buddhist monasteries in the neighbourhood, some small windows and niches in the walls are of unmistakeable Buddhist architecture and the building is above, and quite close to, the group of structures where two coins of Kanishka's A.D. 80-110, and one of Gondophares, A.D. 30-60 (who is said to have killed St. Thomas) were found. It is, therefore, tolerably certain that the date is not later than 80 A.D., and may be much earlier. The Asoka Inscription at Shahbazgarhi is certainly 250 B.C., and from this time until the Muhammadans overran the Peshawar valley in the eighth century A.D., the Buddhist and Hindu religions held the upper hand.¹ Whilst the Yusufzai antiquities furnish good structural examples of early forms of Græco-Bactrian architecture, their sculptured bas-reliefs often contain represent buildings and their ornaments. Perhaps the most striking architectural features that adorn the Gandhara Monasteries are to be found in their statuary and Corinthian capitals of columns and pilasters. General Cunningham brought away a remarkable series from Yusufzai, some of which are in the Calcutta Museum and some in the Lahore Museum. No capitals of any size were discovered by me, but a small pilaster and several small bases and capitals of columns were found at the various sites explored; all are unmistakeably classical, and executed with delicacy and taste. In the Yusufzai ruins we have, therefore, a basis of indigenous art adapted to the requirements of Buddhist religious ordinance, and flavoured with reflections from the Greek and Persian orders of architecture. Besides this, we have artistic representations of no mean order, of the Buddhist tales and fables which are associated all over India and Buddhist countries with the life of Gautama.

¹ Ferishta says that the Moslems greatly increased in A.D. 760, and obtained possession of Peshawar. They were reinforced by the tribes of Ghor, Khilji and Kabul just become proud steps to Islam.

PLATE No. 1.—Sculpture from a mound near the village of Mahomed Nari.

3. The elaborate piece of carving represented was found by Mr. Dempster, C.E., Executive Engineer, Swat Canals, and he kindly allowed me to have it photographed. In the upper right-hand corner we have a very perfect representation of a hemispherical dome on pillars with Corinthian capitals. Whether the domed roofs were of actual leaf seems doubtful. The columns below are certainly taken from stone models, and the domes may have been of stone with a leaf ornament applied to the surface. A somewhat similar domed building is represented in a bas-relief of the railing of the Bharhut Tope in Central India, the date of which has been ascertained by General Cunningham to be 150—170 B.C. Over the head of the right-hand figure is the Buddhist arch, pointed at the top, but circular inside, and it reproduces what is familiar to us in the Buddhist caves in Bombay—in various Buddhist sculptured and painted representations of buildings and in the monolithic Viharas adapted from Buddhist architecture by the Hindus at the Seven Pagodas in Madras. Whether Venice trading with the East got the hint from India or not, the circular archways in the upper part of St. Marks at Venice (dating from the eleventh century A.D.) resemble this Buddhist arch, and have the same pointed termination outside. We have also in this sculpture a tolerably perfect representation of a chapel or niche enshrined in a trefoil arch. The column on Buddha's left is distinctly Indo-Persian, as may be seen by comparing the capital with those at Persepolis. Dentils of a classical form enrich the various mouldings and the rail here used ornamentally is copied from the railings which usually surround Indian Buddhist Topes. General Cunningham has given me the following note: "The small figure at the top represents Buddha on his horse Chanda leaving his home by night. The central figure is Buddha teaching, with a royal figure standing on each side. Below is a row of eight Buddhas."

PLATE No. 2.—Group from the Monastery at Sanghao.

The site where the sculptures were dug is perched on a steep spur, and was the first excavation done under my superintendence in January 1883. The building revealed two distinct periods, and consists of a *basement* containing small topes, and of a *superstructure* of plain apartments, built obliquely over the *basement* apparently without reference to its plan.

The *sculptures* were found in the *basement* and belong to the older period; coins of Kanishka, A.D. 80 to 120, were found in the *superstructure* and belong to the more modern period. Since the photograph was taken, I have pieced many of the fragments together, and so rendered the subjects more intelligible. The collection is for the Lahore Museum.

PLATE No. 3.—Figure from the Monastery at Sanghao.

This is a very curious piece of sculpture. The subject occurs again in a small stone knob¹ found among the ruins at Sanghao, and a similar, although more broken, statuette was unearthed at the same place. The subject occurs again in a fragment dug up at the Upper Monastery at Nuttu. The representation is evidently traceable to some legend. General Cunningham identifies the figure as Maya, the mother of Buddha, being carried up to the Trayastrinsha Heavens after her death, where, it is said, she was "born again." The mode of representing this legend is suggested by the famous statue, by Leochares

¹ General Cunningham found a stone statue of a prince at Jamdgarhi, and in the head-dress is a knob or plume, with a woman and eagle. The carving is in the Calcutta Museum.

(B.C. 326, when Alexander's influence was being felt in India), of Gaunymede, being carried off by Jupiter's Eagle.

PLATE No. 4.—Group from the Monastery at Sanghao.

No. 1 is a fragment of a panel showing figures with joined hands. No. 2 is another representation of Maya and the Eagle. No. 3 is a small pilaster, with a Corinthian cap and the shafts ornamented with figures. This pattern of column is very often met with in Yusufzai. No. 4 represents a doorway with a castellated superstructure. The figures in the entrance appear to be welcoming a person of distinction. No. 5, a man holding a knife or dagger, kneels over a lying figure. A very Greek-looking warrior stands behind with spear and shield. A figure with uplifted hands stands under a tree (date-palm, *Phoenix Syriensis*, often to be seen in Yusufzai). No. 6. Here Buddha is represented being welcomed by some people outside a walled town or castle. One figure is prostrate at his feet.

PLATE No. 5.—Groups from the Monasteries at Sanghao and the lower site at Nuttu.

The fragment on the left represents Buddha on a throne supported on lions. He is surrounded by numerous supplicants. The centre sculpture represents a chapel or small temple. In the upper part of it is the famous triple ladder, or flight of steps, by which Buddha descended from the Trayastrinsha Heavens accompanied by the Gods Brahma and Indra. At the foot of the steps is the nun Pandarika, who had been changed to a man by Buddha, who was aware of his wish to see him. Under trees is the worship of Buddha's turban and hair. The sculpture to the right represents a standing figure of Prince Siddhartha, with an umbrella over the halo round his head; a woman is on the right. The lower sculpture on the left represents Prince Siddhartha and his wife Yasodara. They are seated on a throne in a Palace. The Prince has a wreath in her left hand. Columns with Corinthian capitals support circular arches on each flank. Several figures are represented in an upper gallery. The two fragments in the right-hand corner form part of a frieze, in which are represented the Nirvana of Buddha, and a fire-altar which may have represented the prophet's funeral pile.

PLATE No. 6.—Sculptures from the Lower Monastery at Nuttu and Monastery at Sanghao.

The upper piece represents a chapel or niche with Buddhas and disciples. In the centre is a part of a frieze with small relic-altars. Below are two fragments of a circular band with sculptures of figures and ascetics.

PLATE No. 7.—Group from the Monastery at Sanghao.

No. 1 is a representation of Prince Siddhartha before he left his home to become a mendicant. The head and shoulders are alone preserved. The Prince wears an elaborate turban with plume, a necklet and necklace with dragon-headed clasp. The halo around his head is highly ornamental, with an edging of flowers. On the right is a small figure with turban and plume in an attitude of homage.

Nos. 2 and 3 are fragments of a circular frieze of boys and garlands. Nos. 4 and 6 are small pilasters, such as were used to separate panels of sculpture.

No. 5 is a fragment, the principal figure being a woman holding a small mirror. The presence, behind, of Devadatta and his club, indicates that some plot was probably being laid for Buddha.

PLATE No. 8.—Sculpture from the Monastery at Sanghao.

This is one of the panels placed between pilasters to surround the tope of the monastery. It represents Buddha's visit to the king and queen of the Nagas or snakes; Devadatta, Buddha's hostile cousin, stands on the left with the usual club in his hand. The meaning is that Devadatta has entrapped Buddha into visiting Nagas in hopes of their putting an end to him, but the divine influence is too strong, and they worship him. Devadatta, enraged at his want of success, bolts up the mountain.

PLATE No. 9.—Sculpture from the Monastery at Sanghao.

This is part of a frieze with pilasters at intervals. The stone has become much decayed on the surface.

The subject is the visit of Buddha to the emaciated Tirthika Uruvilwa Kasyapa, an ascetic who lived in a forest of bael trees. On Buddha's left is his cousin, the evil-disposed Devadatta. Beyond Uruvilwa is a very life-like figure of an ascetic bowed down in contemplation.

PLATE No. 10.—Group from the Upper Monastery at Nuttu.

Although covering a small area of about 80 feet by 60 feet, this site yielded some very interesting and elaborate stone sculptures, most of which were found round two small central tope. Pieces of plaster figures were also found. The two tope have a diameter of 10 feet, and with their domes and *tee* or *finials*, would have been about 20 feet above the floor level of the monastery. I have been able to piece many of the fragments represented in the plate, and the whole collection, arranged in small boxes, is intended for the Imperial Museum in Calcutta.

PLATE No. 11.—Fragment from the Upper Monastery at Nuttu.

This represents the birth of Buddha under the Sâl tree in the Lumbini Gardens. The birth occurred when Maya was travelling from Kapilavastu to Kôli, and in a garden of Sâl trees called Lumbini. On Maya's right should be Brahma receiving the young prince who was born from Maya's right side; and beyond him Indra. This half of the panel is missing. Maya is standing under a tree; her right hand raised and holding one of the branches; her left hand is round the shoulder of her sister; beyond is a female attendant holding a chauri of State, and above is a harp emblematic of Heavenly music.

I discovered a very perfect representation of this subject from a small tope at a place called Marjan.

PLATE No. 12.—Fragment from the Upper Monastery at Nuttu.

This is part of a frieze of panels separated by Corinthian pilasters, and represents a seated figure of Buddha surrounded on the right by laymen of rank, and on the left by females. Buddha is shown with moustaches, which is never done in the sculptures that I have seen in other parts of India. The halo around his head is fringed by the foliage of the Jack tree (*Arto carpus integrifolia*), which is not local in Yusufzai. The palms at the sides are the date-palm (*Phoenix*

Sylvestris). The water vessel held by the women has a round handle on the top, also a spout, and resembles vessels in the Bharhut sculptures (B.C. 150-170) being one of the many proofs of the antiquity of the Yusufzai buildings.

PLATE No. 13.—Group from the Upper Monastery at Nuttu.

The three upper pieces are small supporting figures or caryatides, and show variety in the attitudes.

The frieze below probably represents, in part, the procession of the four kings to present their bowls to Buddha. On the right is a broken representation of a seated Buddha, with a bowl in front and two kings offering him two smaller ones. The horses have bridles and head-stalls, which were not used in India until after Alexander's invasion.

PLATE No. 14.—Sculptures from the Upper and Lower Monasteries at Nuttu.

The cremation of Buddha's body is, I think, represented in the first sculpture. To the left is the worship of remains of some kind on a couch, surmounted by an umbrella of State, and to the right a fire-altar being fed with oil by two men with hoods similar to the two figures holding staves in the death of Buddha, Plates 16 and 22.

The second sculpture has several interesting points about it. The style of ornament is Græco-Roman, like the sways or garlands which decorate the entablature of the temple of Vesta at Tivoli, dating 70 B.C. The garland has a Buddhistic significance, and to this day garlands of cloth are carried in procession in Burma to adorn topes or sacred trees. They are frequently represented in the Bharhut and Sanchi sculptures, and seen depending from the sacred Bodhi tree and placed round topes. Two of the figures behind the garland have wings, and play a guitar, and gong or tambourine. The two supporting figures are playing the drum and cymbals.

PLATE No. 15.—Group from the Upper Monastery at Nuttu.

No. 1 is a fragment of a chapel or niche representing two women, one playing a drum and the other a harp. Although it has not come out distinctly in the photograph, the latter has something in her hand, which may be a "Plectrum" similar to what is shown in the Bharhut sculptures as being used to sound the ancient harp. The small drum is beaten with a stick, and not the hand. The floral borders are similar to those to be seen on the Sanchi gates, and may be traced back to Grecian ornament employed in the monument of Lysicrates at Athens (B.C. 334).

No. 2 is that of a female beneath a tree (date-palm, *Phoenix Sylvestris*), a bough of which she is holding in her right hand. There are three other similar figures (see plate No. 10), one holding a bough with her right hand, the other two holding boughs with their left hands. It would thus appear they adorned the two sides of some important sculpture. Besides drapery round the legs, three wear a sort of tunic, one opening down the centre. Three wear scarves round their shoulders, three wear girdles of beads round the loins with a clasp suspending a leaf. The hair is waved over the forehead, and plaited into a sort of wreath over the head finished by two knobs. They all wear tolerably large pendant earrings, necklaces of beads, torques, and bangles round the wrists and ankles.

Nos. 3 and 4 represent Buddha seated on a throne, surrounded by shaven-headed monks or disciples and laymen. The disciples are seated on smaller thrones. Buddha, in both panels, has moustaches, and the nimbus round the head is fringed by leaves of the date-palm. Stone sculptures of Buddha and his disciples found in other parts of India, show the face clean shaven, and the right arm and shoulders bare;—here the right shoulder is draped—probably in deference to the colder climate of Yusufzai.

PLATE No. 16.—Sculptures from the Upper Monastery at Nuttu.

The long frieze of boys and vines is the only example I have seen from Yusufzai. The subject represents a general feast on grapes. In the centre two boys are struggling for a bunch. On the right is a goat on its hind legs eating vine leaves; the whole panel is curiously antique-looking in the rendering of the figures, &c. The wild grape vine (*Vitis vinifera*) grows on the higher hills of Yusufzai, and is also common in Cabul. The lower piece of sculpture represents the death of Buddha. (See descriptive note on Plate 22.)

PLATE No. 17.—Group from the Upper Monastery at Nuttu.

The subject of the woman in the talons of an eagle is shown in Plate 3, and previously described. Here the body is being lifted, the feet just leaving the ground. The fragments at the four corners of the plate call for no special remarks. In the centre is a panel of the death of Buddha, and a panel of Buddha surrounded by worshippers. The peculiar halo, or nimbus of flame round the head of the Saint, and his standing on water, represent his control over the two most potent elements. The small sculpture below is a figure bowed with the weight of the superstructure borne on his back. At Persepolis, figures are found supporting plinths with uplifted hands. The caryatide figures of Greece support on their heads in place of columns. The Telamones are another form of architectural support; but all these are erect, whilst the Yusufzai human figures are all crouched or kneeling in an atlas-like attitude. (See Plates 13 & 21.)

PLATE No. 18.—Group from the Upper Monastery at Nuttu.

No. 1 is a niche or chapel representing a seated Buddha and two attendants in the upper part, the worship of Buddha's head-dress and hair in the centre, and a standing Buddha with six attendants in the lower panel. Nos. 2, 3, 4 and 5 are fragments of a circular frieze, and chiefly remarkable for the ease and grace in the pose and drapery of the figures.

PLATE No. 19.—Group from the Upper Monastery at Nuttu.

The fragment on the left represents the worship of the Dharma-chakra, Triratna and Tirchakra symbols; by shaven-headed monks. Some months after the photograph was taken, I obtained the right half of the panel containing more monks.

The centre figure represents a seated layman of rank. The throne is supported on legs representing lions. The right hand is upheld. The left hand holds what resembles a small vessel.

In other similar statues a lotus flower is held, probably a sign of rank. The usual torque amulet and chain with clasps are worn round the neck. The hair is bound in a simple manner by a band of beads or jewels. On the right

is a portion of a panel representing a chief or king, on his throne with lion legs, under a canopy. A small figure on his left is standing on a Corinthian column, fanning him. Two seated figures are represented beyond. The two fragments underneath are parts of a narrow circular frieze that enveloped the base of a tope and represent a procession of ascetics.

PLATE No. 20.—Group from the Lower Monastery at Nuttu.

The hill had fallen in and partially overwhelmed this site, but three small chapels were excavated which yielded these and other carvings. Besides these, there were many plaster figures attached to the walls, which were too fragile to remove. The stone carvings are destined for the Central Museum at Madras.

PLATE No. 21.—Sculpture from the Lower Monastery at Nuttu.

This represents shaven-headed monks paying adoration to the Dharma-chakra or symbol of the wheel, which is surmounted by the Triratna, or symbol of the "Three Gems," above which are three wheels, or Dharma-chakras. The Triratna is described as the triple object of veneration—Buddha, the law, and the church. The wheel symbol, is the wheel of the law of Buddha. The attitude of the supporting figure with uplifted hands, is suggestive of Atlas.

PLATE No. 22.—Sculpture from the Lower Monastery at Nuttu.

Buddha died at the age of 80 at Kusinara or Kusinagara, east of Gorakhpur, at a place called Kasia, and passed away—as he was born—under a Sāl tree. He is here represented lying on a four-legged bed with a mattress and pillow, surrounded by the chiefs of the Mallians of Kusinagara. The event occurred in B. C. 543. The evil-disposed cousin Devadatta is represented at the back with a diabolical expression of glee. A seated figure, with his back turned, is shown at the foot of the bed. The prostrate figure is probably one of the disciples ill from grief. The bed on which Buddha is lying might be a modern charpoy, and the presence of a mattress and pillow show that civilization in the first century A.D. was more advanced in India than it was in many western countries at the same period. The scene represented in Plate No. 16 is between two pilasters with Corinthian capitals. Close to Buddha's bed is a tripod, from which suspends what looks very like a modern soda-water bottle, but which was probably a porous vessel used for cooling the drinking-water of the Saint in his dying moments.

PLATE No. 23.—Part of a niche from the Monastery at Mian Khan.

The Mian Khan monastery had only been partially explored when the Plates Nos. 23 to 30 were taken. It must have been a place of importance, the enclosure measures 84 feet by 66 feet, and contains some eighteen topes. No relics or coins were found, but the sculptures, although very broken, are numerous, and of considerable interest. They are destined for the Imperial Museum in Calcutta.

The sculpture here represented is part of a niche or chapel.

A king and queen are seated at a small table engaged in gambling. The queen is seated on a stool with her feet on a foot-stool. The king is on a throne, his feet also on a foot-stool. The right arms of both are on the table. The left arm of the queen is uplifted as if throwing dice. In the back-ground are two female attendants with chaoris. The king has a jewelled plume in

front of his turban. General Cunningham describes the upper part of the niche as containing Buddha's alms-bowl under an umbrella as an object of worship.

PLATE No. 24.—Figure from the Monastery at Mian Khan.

This is the upper part of what must have been a large statue, and measures about 2 feet 9 inches in height. The mode of dressing the hair is very elaborate. A band of jewels is worn across the forehead; the massive earrings drag down the lobe of the ear; a chain with dragon clasps is worn round the neck as well as a torque; a chain of stones or beads is worn over the right shoulder, and a string of amulets is worn across the body under the right arm, which has an armlet with a human head represented on it. Such rich ornaments show this to be a royal person, probably Prince Siddhartha before his asceticism.

PLATE No. 25.—Figure from the Monastery at Mian Khan.

This is a very perfect figure about 1 foot 2 inches in height. The halo denotes some connection with the church, but the ornaments are those of a king or chief. The mode of dressing the hair with a top-knot and jewels entwined is peculiar. The right hand, uplifted, has a representation of a lotus flower in the palm—another royal sign. Armlets are worn on both arms, and the left hand holds a small vessel for water, scent, or perhaps relics. Besides the drapery round the loins, there is a cloth over and about the shoulders, leaving the right shoulder bare.

PLATE No. 26.—Group from the Monastery at Mian Khan.

The small fragment at the upper left is part of a small circular frieze representing ascetics. The three surrounding pieces represent Buddha and his disciples. The two lower carvings are terminal with boys, on lions, pulling their tails. I afterwards found the centre piece representing a boy mounted on a standing lion.

PLATE No. 27.—Group from the Monastery at Mian Khan.

No. 1, a small frieze of figures. No. 2, part of a circular frieze, representing ascetic life—a figure struck down by a storm. In the centre is a small tree with large leaves (Jack tree—*Artocarpus integrifolia*).

No. 3 is a fragment of a standing Buddha. No. 4 is the worship of symbols. Nos. 5 and 6 are parts of a frieze, probably representing one of the Jatakas, or birth-stories of Buddha.

PLATE No. 28.—Group from the Monastery at Mian Khan.

The heads Nos. 1 to 5 are particularly good, and show a variety of head-dress. No. 6, part of a garland frieze, is not so classical-looking as the frieze in Plate No. 14. No. 7 is a seated Buddha and disciples. No. 8 is a seated chief under an umbrella or canopy with surrounding attendants. No. 9 is a narrow frieze of niches with Persepolitan pillars.

PLATE No. 29.—Group from the Monastery at Mian Khan.

There is nothing about these fragments not already described, excepting the lower centre piece, which is part of the body of an elephant carrying a seated figure on a throne.

PLATE No. 30.—Sculpture from the Monastery at Mian Khan.

This sculpture was found very much damaged. It represents an often-depicted scene. Devadatta caused an elephant to be dragged in hopes of his charging and destroying Buddha. People assembled at the city gate to witness the event, but instead of harm the animal does obeisance. Here we have a representation of walls with battlements, and a doorway with sloping jambs, like the Etruscan doors of the fifth and fourth centuries before Christ.

Appendix J.

Tomb of Jahangir at Shahdara near Lahore.¹

1. After the death of Akbar in 1605 A.D., his son Salim assumed the government of the empire under the title of Jahangir, "Conqueror of the world." Sir Thomas Roe, sent by King James in 1615 A.D., to the court of the Emperor, gives us an idea as to the state of India at the time. Though judicious, Roe is profuse in praise of the magnificence of the court, and speaks in high terms of the courtesy of the nobility and their entertainments. Referring to the natives he writes—

"They are a people of a strong and quick apprehension, ready wit, and very great fancy and ingenuity in all manner of fine works. Thus, their delicate stained cloths, their silks, their cotton carpets of so many mingled colors, in short, all their flowered works in silk, gold, and silver are plentiful evidences of. Then they make all sorts of cabinets, boxes, standishes, trunks, &c., with that exquisite skill and fancy that they deserve to be reckoned amongst the master workmen of the world in all respects. They'll inlay (with elephant's tooth, mother-of-pearl, ebony, tortoise shell or wire) anything that is capable of being wrought upon. They work abundance of cups out of agate, cornelian, and other fine stones; polish and cut all manner of jewels, and understand the value of them as well when they have done. They know how to buy and sell all those nice ticklish commodities, and he that gets the better of them in a bargain must be a very clever man indeed."

There was a great influx of Europeans about the court of Jahangir and considerable encouragement given to their religion. Tavernier, writing in A.D. 1651, tells us that the Emperor had a palace at Lahore, on one gate of which was a crucifix and on another a picture of the Virgin Mary. The traveller remarks—

"Some have thought these marks of Christianity which was anciently professed in those countries, but it is really nothing but a piece of flattery and hypocrisy of King Jahangir to oblige the Portuguese to be his friends."

2. Jahangir's buildings, except the tomb of Akbar at Sikandra, which, if not his design, was, as we see it now, the work of his time, are not on the same scale of magnificence as those of his father or of his son Shah Jahan. But amongst those worthy of particular notice are the Jahangir Mahal in the Agra Fort, built immediately after the death of Akbar; the tomb of Et-mad-ud-Dowlah (father of Nur Mahal, Jahangir's Queen) at Agra; and the gateway of the Sarai at Nur Mahal on the road to Kashmir, built 1620 A.D. In 1624 A.D. Jahangir paid his second visit to Kashmir, built many palaces as well as summer-houses and completed the celebrated Shahlimar gardens near Srinagar immortalised by poets and travellers. He was fond of Lahore and there built the tomb of Anar Kali; the Moti Masjid in the fort, now used for storing rupees; and the greater Khwahgah or sleeping palace, also in the fort.

3. In 1622 A.D. he fixed his court at Lahore, and when he died in Kashmir in 1627 A.D., his body was taken back to Lahore where it was buried in the garden of Nur Jahan. On the south side of the white marble sarcophagus, which rests in the centre of the building erected by Nur Jahan is inscribed "The glorious tomb of His High Majesty, Asylum of Protectors, Nur'ddin Muhammad, the Emperor Jahangir, 1037 A.H." (=1627 A.D.)

¹ Views of Jahangir's Tomb are given in Hardinge's (son of the Governor General) "Recollections of India," folio London, 1847.

Plate No. 1.—General Plan of the Tomb of Jahangir (Chromolithograph—Double Plate.)

4. Shahdara is on the west bank of the Ravi and about 3 miles from Lahore. Here are—

- (1) The tomb of Jahangir with its square enclosure and garden.
- (2) The sarai for the accommodation of native visitors to the tomb.
- (3) The tomb and enclosure of Asaf Khan (Jahangir's Minister).
- (4) The tomb of Nur Jahan (Jahangir's wife).

5. The whole place, except the actual tomb of Jahangir, looks ruined and neglected. Bahadur Shah, Ahmed Shah, and Ranjit Singh cruelly maltreated the buildings, and Ranjit Singh carried off many of their marbles and ornamental building materials. The occupation by the British troops after the Sikh war caused additional damage. Since that time the sarai between the tombs of Jahangir and Asaf Khan has been occupied by the Punjab Northern Railway as an engine yard. Holes were knocked into the walls, the grounds broken up, various gateways being converted into dwellings for the Railway employes. This latter evil has been remedied since 1881, and the place is at least no longer misappropriated.

6. The tomb of Asaf Khan has (by the Sikhs and others) been stripped of its marble and stone facings; only small portions of the encaustic tiles are left in the arched entrances. The building has received slight repairs to secure what remains. The north gateway of the enclosure to the tomb was converted by the Railway authorities into a dwelling, and is now in the hands of Bhai Mian Singh, who has proprietary rights of all the buildings of the enclosure. The gateway, with its handsome tile-work, should be freed of the modern additions which obscure it. Jungle and cultivation have taken the place of the original garden.

7. The tomb of Nur Jahan (not indicated on the plan, but to the south of Asaf Khan's) is in ruins, having been used as a quarry by the Sikhs; and Fergusson says, half the splendour of the temple at Amritsar is due to the marbles plundered from this mausoleum.

Plate No. 2.—Elevation and Section of Jahangir's Tomb—(Engraving—Double Sheet.)

8. Although the tomb of the Emperor has been better treated than those of his wife and minister, it is in considerable disrepair. Mr. Thornton, in the *Gazetteer of Lahore*, informs us that—

"it mourns the loss of an elegant lattice-work parapet of marble which surrounded the roof and galleries of the minars, and must have given a lightness to the structure which at present it does not possess." (Verified by General Cunningham.)

9. It is also asserted that a marble dome once rose from the centre of the roof over the vaulted chamber which contains the tomb, but that Aurangzib removed it in order to insult the remains of his unorthodox predecessor.¹ General Cunningham heard the same in 1838 A.D.

10. I do not believe that the central building had a dome, but Aurangzib may have taken down the structure. At all events it appears from the accounts of Tavernier that Aurangzib carted marbles to Aurangabad from Lahore; and as there are no quarries in the neighbourhood, it may be inferred that he com-

¹ The entrance gate of the sarai at Nur Mahal built by Jahangir is covered with animals and figures which would have been very offensive to a bigotted Muhammadan.

menced the pillering of buildings which Ranjit Singh more vigorously continued.¹

11. The marble pavilion in the Hazuribagh, near the Lahore Fort, which I believe came from the centre of Jahangir's tomb, has abundant evidence of having been designed by Muhammadans. In setting it up on the present site, the Sikhs introduced a good deal of their own ornament, but the modern work can be easily detected, whilst the older portions, such as the columns of the upper apartment, the trellis railings, and much of the terrace inlaid work is of the same style and period as the tomb of Jahangir.

12. The central platform over the sarcophagus (see Section, Plate No. 1) measures 53 feet 6 inches square, and the marble paving, by which it is covered, has indications of having supported a structure above. The inner line of a band of red sandstone measures 45 feet square, the exact dimension of the exterior wall of the Hazuribagh pavilion. When the plan of the latter is applied to the plan of the platform other coincidences become evident, the centre apartment of the Hazuribagh pavilion falling over the present skylight of the central chamber of the tomb, and its columns taking an alignment over substantial vaultings.

13. The central chamber of Jahangir's tomb, although approached by four passages, is shut in on three sides by handsome screens of pierced marble, and can only be entered on the west side. (See Section, Plate No. 1.)

14. The building in its present condition is very incomplete and neglected. A most careful scrutiny of all its parts is required before arriving at a just appreciation of the original design. Many years ago clumsy repairs were applied in coloured plaster to the inlaid portion of the red sandstone façade of the colonnade (see Plate No. 3). The interior of the verandah was up to 1881 covered with plaster and whitewash, a partial removal of which now reveals a handsome tile dado (see Plates Nos. 6 and 7) and in parts coloured frescos. It is doubtful whether the terrace of marble mosaic covering the entire building keeps out rain; it is discoloured and decayed. A shower brightens up the colours of the various slabs, but the effect is transient and soon disappears under a warm sun.

15. To restore the tomb and surroundings in the same thorough way as the Taj would cost a large sum; meanwhile repairs have been executed by Lieutenant Abbott, R.E., who was appointed by Sir Charles Aitchison to the

¹ Vol. I. *Monuments Anciens et Modernes de L'Hindoustan*. L. Langlès, Paris, 1821, page 144. speaking of Aurangabad. "Le Voyageur Tavernier, qui parcouroit ces cantons en 1645, vit en effet le prince Muztan (Aurangzeb) occupé à construire dans sa nouvelle ville une magnifique mosquée au tombeau et un teboultry en l'honneur de sa première femme. Les marbres employés aux deux premiers monuments étoient apportés de Lahor." In vol. II, page 146, it says: "Tous les montages de Lahor s'ont à dire de la distance de plus de quatre mils de chemin. Le même voyageur rencontra trois ou quatre cents chariots traînés par deux et quinze bœufs, et chargés d'énormes blocs de marbre."

Moucroff. *Travels in the Himalayan Provinces, 1819-1825*. John Murray, London, vol. I, page 208 (May 1820). "There is nothing worthy of note at Shalidahan except the tomb of Jahangir Shah. The structure which is built of a reddish freestone stands in the centre of a spacious quadrangle to which entrance is given by a handsome gateway of marble and enamel. It is surrounded by a long corridor with cells for fakirs. The corridor is paved with variegated marbles and the walls are decorated with paintings. In the interior of the mausoleum is an elevated sarcophagus of white marble, embracing the remains of the sovereign of Delhi, the sides of which are wrought with flowers of enamel, in the same style of elegance as the tombs in the Taj at Agra, the floor and walls of the chamber are of marble, and along the latter run passages of the Koran. The building was surrounded, it is said, by a dome, but it was taken off by Aurangzeb, that his grandfather's tomb might be exposed to the weather as a mark of his repudiation of the loose notions and licentious practices of Jahangir. Such is the story, but more probably the building was never completed. The roof is now square, presenting an open work screen, with a lofty minaret at each angle. The edifice is of great extent and of surpassing beauty."

charge of the Punjab Archaeological Sub-division. The security of the buildings should be assured and means taken to bring the various ornamental portions into their original prominence. Cleaning off dirt and whitewash from existing mosaics and tile-work, and securing them in their places, cleaning and renovating the coloured paintings of the interior, seem to me remedies which should be unsparing.

Plate No. 3.—Details of Marble and Stone on the outer Face of the Tomb (Chromolithograph—Single Plate.)

Plate No. 4.—Details of Marble and Stone Pavement (Chromolithograph—Single Plate.)

Plate No. 5.—Details of Marble Mosaic and Fresco (Chromolithograph—Single Plate.)

16. Although not so extensive or of such costly materials as Akbar's tomb at Agra, this building and its surroundings must have satisfied the most lively and appreciative imagination. The outlying gates of the enclosure were brilliant with frescos and glazed tiles, whilst all the resources of the art of inlaying in marble, stone, and pottery were lavished on the central tomb.¹ There is no structure in India which presents so many classes of mosaic work as this.

- I.—The whole of the red sandstone façade of the colonnade is incrust-
ed with black and white marble disposed in panels and niches
filled with outlines of vessels, flags, &c. The ornament (see
detail of colonnade, Plate No. 3) is dignified without too great
severity, and the detail patterns are appropriately subordinate to
the leading lines of the arcade and corner towers.
- II.—The four minarets, the most prominent features of the building, can
be seen from a considerable distance, and are inlaid with zigzag
bands of variegated marbles and yellow stone. (See Plate
No. 3.)
- III.—The terrace and verandah are paved with mosaics of marble and
stone laid in geometrical patterns. (See Plate No. 4.)
- IV.—The sarcophagus and the circular bosses of the spandrels of the
colonnade are of veritable "Pietra Dura." (See Plate No. 5.)

¹ The art of inlaying for architectural purposes may be classed as follows:—

Ancient Mosaics.—Dating from the time of the Egyptians to the era of Constantine the Great, A.D. 330. The best known among these are the Roman mosaics which date from 80 B.C. and are thus classified:—

- i.—*Opus Tessellatum*, consisting of small tesserae of marble composing a geometric figure, such as the pavements at Pompeii.
- ii.—*Opus Sectile*, consisting of slices of marble producing a piazzing effect through shape, colour, and vein, introduced about 50 B.C.
- iii.—*Opus Figulinum*, a more extended scale of shade and colours used than in *Opus Tessellatum*, and the material compounded of silex and alabaster, in all colours.
- iv.—*Opus Vermiculatum*, composed of Figulinum in conjunction with fragments of marble and gems, figures, ornaments, pictures, applied to walls and ceilings. (An example of ancient mosaic was found at Hoxstow in Lincolnshire dating 200 A.D.)

Medieval Mosaics.—Date from 320 A.D. to 1350 A.D. and consist of three varieties, which obtained universally in Italy:—

- i.—Glass mosaic, *Opus Musivum*, for walls and vaults.
- ii.—Glass Tessellation, *Opus Grecanicum*, generally inlaid in church furniture.
- iii.—Marble Tessellation, *Opus Grecanicum* and *Opus Alexandrinum* formed into pavements. This is an arrangement of small cubes, usually of porphyry or serpentine in grooves cut in the white marble slabs which form the pavement (English example, Edward the Confessor's tomb, 1070 A.D.)

Florentine Mosaics or Pietra Dura, introduced in 1558 A.D. in imitation of the ancient *Opus Sectile*.

V.—Lastly, the dados of the verandah and four approaches to the central chamber are of glazed tile mosaic. (See Plates Nos. 6 and 7.)

17. There can be little doubt that the graceful and delicate foliated *Pietra Dura* which is used as exterior ornament for the first time in Jahangir's tomb and became so characteristic a feature of the Taj at Agra, and Shah Jahan's other buildings, was introduced from Florence. The *Fabrica Ducale* of Florence was founded by Ferdinand I., Grand Duke of Tuscany, in 1558 A.D. The first *imitation* of the Florentine work that I know is inside the Jagmandir Palace at Udaipur, the very building in which Shah Jahan was located when a fugitive prince, and from which I think it not unlikely he got the idea of the work.

18. A very bold class of floral mosaic had, it is true, been introduced into the gateway of Akbar's tomb at Sikandra in A.D. 1613, but the example in the Jagmandir Palace of ten years' later date is much nearer related to the Florentine *Pietra Dura*.

19. The following are some of the principal oriental mosaics:—

- (1) Palace of Asueras, Persia, B.C. 519-550.
- (2) Greek mosaic pavements, time of Alexander the Great, B.C. 323.
- (3) Byzantine glass mosaics, A.D. 350.
- (4) Ala-ud-din's gateway at the Kutub, Delhi, inlaid with bands of marble, A.D. 1310.
- (5) Tomb of Tughlak Shah at Delhi, inlaid with bands of marble, A.D. 1321.
- (6) Mosaic pavement, Alhambra, A.D. 1354.
- (7) Tomb stone of Ahmed Shah's wife, Ahmedabad, inlaid with marble and mother-of-pearl, A.D. 1430.
- (8) Tomb of Hoshang Shah at Mandu, tessellated pavement, A.D. 1432.
- (9) Mosaic pavement in coloured plaster, Jamali Kamali Tomb, Delhi, A.D. 1528.
- (10) Kila Kona Mosque, Delhi, marble mosaic, A.D. 1540.
(Introduction of *Pietra Dura* at Florence, A.D. 1558.)
- (11) Akbar's Mosque, Fatehpur Sikri, geometric mosaics, A.D. 1571.
- (12) Rainn Ugan Palace, Udaipur, mosaic pavement, A.D. 1571.
- (13) Akbar's tomb, Sikandra, floral mosaics, &c., A.D. 1613.
- (14) Jagmandir Palace, Udaipur, *Pietra Dura*, floral patterns, A.D. 1623.
- (15) Jahangir's tomb, Lahore, mosaic and floral *Pietra Dura*, A.D. 1627.
- (16) Etmad-ud-Dowlah's tomb, floral mosaics, *Pietra Dura*, Agra, A.D. 1628.
- (17) Jess Mandir Palace, Amber, black and white marble mosaic, A.D. 1630.
(Influence of Austin de Bordeaux at Agra and Delhi.)
- (18) Shah Jahan's palaces, Agra, floral *Pietra Dura*, A.D. 1639.
- (19) Shah Jahan's Taj, Agra, floral *Pietra Dura*, 1648.
- (20) Shah Jahan's palace, Delhi, black marble *Pietra Dura*, floral patterns introducing birds, animals, and Orpheus, A.D. 1648.
(Four skilled mosaic workers sent from Florence to the Great Mogul, 1688 A.D.)

Plates Nos. 6 & 7.—Details of coloured Tile Mosaic (Chromolithographs—Single Plates.)

20. The tile dados in the verandah and passages (see Plates Nos. 6 and 7) are particularly handsome and of the mosaic class, which became popular in the

Lahore buildings. The employment of glazed tiles for architectural purposes dates from Rhamses II. (B.C. 1452). The Chinese also used coloured porcelain in their buildings from an early period; but as far as I have been able to ascertain, the first Muhammadan building in which glazed tiles were used is the Villa Viciosa, mosque of Cordova, in Spain, which, according to Prisse, dates from A.D. 965, and according to Fergusson from A.D. 1200. General Cunningham dug up a quantity of blue glazed tiles outside the Kutub-ul-Islam Mosque at Delhi, the date of which must have been the latter part of the 12th century. He also identified the date 500 of the Hijra on a blue glazed tile in the Lahore Museum, which would correspond to about 1107 A.D.

The following oriental buildings are good examples of the early employment of tiles:—

- (1) Jami Masjid, Budaon, 1223 A.D.
- (2) Tomb of Bahawal Huk, Multan, 1250 A.D.
- (3) Mosque at Tabriz, Persia, 1294 A.D.
- (4) Mosque of Chey Koum, Cairo, 1354 A.D. (The earliest use of glazed tiles in Cairo.)
- (5) Tomb of Tamerlane's father, Samarkand, tile mosaic, 1360 A.D.
- (6) Tomb of Tamerlane at Samarkand, tile mosaic, 1404 A.D.
- (7) Man Singh's Palace, Gwalior, tile mosaics, 1507 A.D.
- (8) Jamali Kamali Tomb, Delhi, tile mosaics, 1528 A.D.
- (9) Tomb of Muhammad Mumin at Nakodar near Jullunder, 1612 A.D.
- (10) Jahangir's tomb, Lahore, tile mosaics, 1627 A.D.
- (11) Wazir Khan's mosque, Lahore, tile mosaics, 1635 A.D.

The use of brightly coloured tiles in buildings is particularly grateful to the eye in hot and sandy localities, and I well remember at Sukkur in Sind, where the vegetation is, to say the least, scarce, how gladly one's eye rests on the little patches of gay tile-work in the tombs and buildings of the town.

Plate No. 8.—Details of paved walks (Chromolithograph—Single Plate.)

Plate No. 9.—Details of Alcove and Wall (Engraving—Single Plate.)

21. The garden of Jahangir's tomb is laid out in 16 equal squares, separated by paths of brick laid on edge, channels of water, and fountain tanks. The paths about the centre building are a species of mosaic, the brick-on-edge being laid in geometric patterns bordered by black marble (see details C, D, E, Plate 8). A wall with alcoves at the angles surrounds the whole, on all four sides, but the river has washed away the corner to the south-east (see Plate No. 1). The encroachment has, for the present, stopped. There are gate buildings on the north, south, and west. That to the west is of red sandstone, inlaid with marble mosaics, also decorated with fresco.

22. It is most desirable that means should be found to put the grounds of the two tombs in good order, and the jungle and cultivators got rid of. The place is distinctly one of the most interesting in Lahore, and is resorted to by both Europeans and Natives.

Appendix K.

Shahlimar Bagh, Lahore.

1. The number and extent of the ruins which surround the present walled city show that Lahore and its environs covered a circle with a radius of about 3 miles. The whole area between the Shahlimar gardens and the River Ravi is filled with the remains of tombs, mosques, and numerous gardens, which during the reign of Shah Jahan must have formed a vast and picturesque group worthy of an imperial city.

2. The Shahlimar Bagh, or Imperial Garden Palace, some 6 miles east of the Lahore Fort, was designed and built in 1637 A.D. for Shah Jahan by Ali Mardan Khan, in development of Jahangir's Shahlimar gardens on the city lake at Srinaggar in Kashmir.

3. This latter well known summer retreat, measuring 500 by 207 yards, is enclosed by a masonry wall 10 feet high, and arranged in four terraces. A mountain stream traverses the water channels and cascades of the garden. There are various pavilions, the uppermost being the best and surrounded by fountains.

4. The Lahore garden, measuring about 520 by 230 yards, is shut in by a masonry wall 20 feet high, and arranged in three terraces with a number of alcoves, gateways, and isolated pavilions; on the east side there is a Turkish Bath or Hammam. Water from the Bari Doab Canal traverses the channels, cascades, and fountain tanks from south to north.

5. The disturbed state of the Punjab in the eighteenth century placed the palaces and buildings of the Moguls at the mercy of Afghans and Sikhs. The invading army of Nadir Shah encamped in the gardens in A.D. 1738. Ten years later Ahmed Shah's camp was fixed in the vicinity. Shortly after, 1799, Ranjit Singh restored the gardens which had gone to ruin during the troublous times of Ahmed Shah, but he removed the marble pavilions and substituted plaster structures in their place.

6. The grounds, although Government property, are at present let out on lease for the cultivation of fruit, the consequence being that the upper and lower plots are too thickly planted, and cared for without regard to arboriculture.

7. Lieutenant Abbott, R.E., Assistant Engineer, Archaeological Sub-division, Punjab, has done a good deal to improve the condition of the grounds and prevent their being flooded, but the flow of water through the channels is still out of control, and the lower terraces get frequently swamped, thereby causing deterioration of the masonry walls and walks. Repairs have also been applied to some of the pavilions, &c., but a good deal remains to be done before the place can be said to be in proper preservation.

8. The Shahlimar Bagh is one of India's Imperial works, and as such has, I submit, a claim to the consideration of the Governor General in Council, as well as of the Punjab Government. Some assistance has, for the past two years, been given in money from Imperial funds, but to place the grounds and buildings in substantial repair will cost a large sum, probably Rs. 50,000; they are resorted to by large numbers of residents, European as well as native, and could under scientific direction be rendered both profitable and attractive.

9. Muhammadan Princes all over the world showed as much taste in their dwellings as in their mosques and tombs, but as the conditions of climate,

custom, and religion necessitated a special type of building, their palaces were not compact masses like those in Europe, but consisted of a number of detached pavilions, reception rooms of great and little state, sleeping and other apartments, scattered over large spaces and separated by trees and gardens; they were therefore more liable to succumb to the ravages of time and weather, or to mutilation by invaders and conquerors.

10. Among the numerous Mogul Palaces known in India during the present century, only a few exist. Those in the Lahore Fort have been altered so utterly as to attract little attention. The Delhi Fort Palaces have given way to barracks, only some of the more precious buildings having escaped destruction. The Agra Palace, owing probably to the peculiar necessity during the mutiny of 1857 of housing in it families of English officers, has remained in some degree intact. A special pass from the Commissary of Ordnance admits the visitor to the Palace of Akbar in the Allahabad Fort, but it is unrecognisable, except as a dépôt for ordnance stores. All these were originally highly ornamental structures, with court-yards, gardens, and fountains, special halls for interviews with the Emperor and public *darbars*, women's apartments, galleries and cloisters, guard-rooms, &c. Old Indian miniatures, most of which have been acquired for foreign collections, give an idea of princely domestic life. Ladies of rank are represented performing their toilets in little courts with fountains and trees; their husbands are shown seeking rest and repose in gardens of the *seraglio*. To qualify the heat and glare of the fierce tropical sun was the aim of Indian architects, who got to well understand the value of enclosed courts with their cool shade, pleasant shrubs and flowers, running water, and splash of fountains.

11. The following are some of the principal gardens of the Mogul Emperors:—

Baber, reigned A.D. 1526—1530.

This Emperor built the garden and mosque, called the "Cabul Bagh," at Panipat, Punjab, to commemorate his victory over Ibrahim Lodi, A.D. 1527. (Only a mosque and Baber's inscription remain, the garden no longer exists.) The body of Baber was in A.D. 1530 temporarily interred in the Ram Bagh, a well-known garden at Agra, but afterwards removed to Cabul. Prince Kamran, brother of Humayun, when viceroy, was the first to begin garden-building at Lahore, and a pavilion of his is now used as a toll-house at the bridge of boats.

Humayun, reigned A.D. 1530—1556.

Humayun's Tomb stands in the midst of a fine garden, which within the last few years was disfigured by use for cultivating tobacco and other crops. *The leaseholder, a descendant of the last king of Delhi, derived his income from the profits made out of the grounds.* The gardens are now cared for.

Akbar, reigned A.D. 1556—1605.

Abul Fazl states that Akbar brought gardeners from Persia to Lahore to cultivate grapes and melons. Akbar constructed gardens at Fatehpur Sikri, but nothing of importance. During his reign Man Singh made the Dilaram garden on the bank of the Tal Koutara Lake at the Foot of the Amber Palace, near Jaipur. The garden of the palace of flowers at Uchha was also work of his time.

Jahangir, reigned A.D. 1605—1627.

Jahangir was a great gardener:—

I.—The Shahlimar gardens, near Srinagar in Kashmir, being the most important of his work.

II.—The grounds surrounding the tomb of Akbar, his father, at Sikandra were laid out in his reign.

It is said that Nur Jahan, his Queen, selected the sites of—

- | | |
|-------------------------|---------------|
| III.—The Nasim Bagh, | } in Kashmir. |
| IV.—The Nishat Bagh, | |
| V.—The Manusbal garden, | |
| VI.—The Vernag garden, | |

The following were constructed by the Emperor:—

VII.—Garden of the larger Khwabgah in the Lahore Fort (no longer exists).

VIII.—The Daulat Bagh at Ajmir.

IX & X.—The gardens of the two Island Palaces at Udaipur, the Jagmandir and Jaghavas.

XI.—The Khushru Bagh at Allahabad.

XII.—Garden round Etmad-ud-Dowlah's Tomb at Agra.

XIII.—Nur Jahan's garden at Shahdara, Lahore (where the Emperor was buried).

Shah Jahan, reigned A.D. 1627—1658.

This Emperor built:—

I.—The Shahi Bagh at Ahmedabad (when Viceroy).

II.—The Lahore Shahlimar gardens.

III.—The Haiyat Baksh gardens in the Delhi Fort (now destroyed).

IV.—The Anguri Bagh in the Agra Fort.

V.—The gardens surrounding the Taj at Agra.

VI.—The Kandahari Bagh at Agra (where one of his wives was buried).

VII.—The garden of the smaller Khwabgah, in the Lahore Fort.

Of his period were:—

VIII.—The Begam's Bagh, or Garden of Jahanara, Delhi (now the Queen's gardens).

IX.—Garden of Zeban Nishan, Lahore (only the gateway known as the Chauburji now remains).

X.—Roshanara Bagh, Delhi.

XI.—Pinjore gardens near Kalka on the road to Simla.

XII.—The Golabi Bagh, Lahore (only the entrance gate now remains).

Aurangzeb, reigned A.D. 1658—1707.

This Emperor built no gardens of importance.

Modern gardens, after A.D. 1707, were—

I.—Kudsiah Bagh at Delhi.

II.—Garden of Safdar Jang's Tomb at Delhi.

III.—Ram Bagh at Amritsar	} Ranjit Singh's time.
IV.—Hazari Bagh at Lahore	

V.—Gardens of the Begums of Bhopal.

VI.—The Bari Mahal at Udaipur has a garden for its upper story, surrounded with marble trellis kiosques, and pavilions.

PLATE No. 1.—Chromographic Plan of the Shahlimar Gardens (Double Plate.)

12. As will be seen from the plate, the arrangement of the Shahlimar gardens follows the usual formal plan of the Muhammadans. On entering the gateway to the south, there are four square plots separated by water channels and a row of fountains down their centre. Each plot is alike, arranged as shown at O O O O. Between the west and east enclosure walls are two pavilions, one now used for natives, the other for European visitors. The latter was probably the women's apartments, as it is shut in from outside by a small projecting garden (not shown on the plan). Passing up the centre avenue, one reaches the principal pavilion and large tank, L L, filled with fountains and surrounded by ornamental flower beds. South-east of this pavilion is a building called the Khwabgah,¹ or sleeping room, and in the centre of the east boundary wall of the grounds a Hammam, consisting of various domed rooms fitted with brightly painted doors. The terraces flanking the large central tank east and west are 14 feet below the upper garden, and 4' 6" above the lower garden. The tank and its walks are raised some 4' 6" above this intermediate terrace, forming, with its fountains and pavilions, the chief attraction of the place. The lower garden is broken up into four square plots, each arranged as at B B B B, and separated by water channels and walks. The gateways at E and D are decorated with tiles. The brick-on-edge walks are damaged by the overflow of the water from the channels, and the trees and shrubs closely packed present a jungly appearance.

PLATES Nos. 2 & 3.—Chromolithographs of Details of the Work (Double Plate.)

13. The coloured tile work on the gateways, shown at E and D on the General Plan, is of the mosaic class. The leaves and flowers of the different patterns are formed of separate pieces of tile, accurately cut and fitted, the colours being very brilliant. The enamel glaze is of light and dark green, white, yellow, orange, purple in two shades and light and dark blue. The tiled decorations cover both the interior and exterior of each gate, and the whole should be carefully preserved. It is very desirable for visitors to have access to the outside, which at present is not easy.

PLATE No. 4.—Engraving of Details (Single Plate.)

14. This shows the marble details of the fountains, &c., in the great tank at L L on the General Plan.

¹ Writing on 6th May 1820, Moorcroft says: "I started at three, and at nine reached Shahlimar, the large garden laid out by order of Shah Jahan, where I took up my abode in a chamber erected by the Raja close to a well, and a reservoir which it supplies, and from which jets-d'eau are made to play so near to the apartment as to cool the air at its entrance. Ranjit Singh has to a considerable extent put the garden in repair. It is said to contain too bigahs, the whole enclosed by a wall, in the course of which are several buildings. The grounds are intersected by canals, and the walks are formed of bricks laid edgewise. In the middle of the garden is a large square basin for holding water, furnished with copper tubes for fountains, and a white marble slope, carved into a surface of leaves and shells, divided into compartments by lines of black marble. There are some open apartments of white marble, divided into compartments by lines of black marble. In front a square marble chamber, with marble of one story on a level with the basin, which present in front a square marble chamber, with a recess on its sides for lamps, before which water may be made to fall in sheets from a ledge rounding the room at top, whilst streams of water spout up through holes in the floor. This is called "Sawan Bhadon" as imitative of the alternation of light and darkness with clouds and heavy showers in the season of the rains. The ground is laid out in platforms and is covered with fruit-trees."

Appendix L.

Lahore Fort.

PLATE No. 1.—Plan showing the Original Buildings. (Engraving, Double Plate.)

1. The city of Lahore formerly "*Lohawar*" was founded between the first and seventh centuries of the Christian era by a Rajput colony.¹ No Hindu remains have been discovered in evidence of the architectural pretensions of this period. The present buildings are those of the reigns of Humayun, Akbar, Jahangir, Shah Jahan, and Aurangzib.

2. During Akbar's residence at Lahore (1584-1598 A.D.) he enlarged the fort and round it and the city built a wall, portions of which still exist. The *Akhari Mahal*, shown in the plan in the east portion of the fort, was a work of his time, but now demolished. He also built a *Throne-room*, which I imagine lay west of the existing *Diwan-i-am*. The present hospital occupies an old *Hamman* and part of a hall which is probably a portion of the *Throne-room*. The gateway leading from the *Hazaribagh* is also of Akbar's time.

3. Jahangir fixed his Court at Lahore in 1622 A.D., and built the *Greater Khwabgah* on the north face of the Fort. It consisted of a large quadrangle, with a colonnade on three sides, of red sandstone columns, carved with bracket capitals of the figures of elephants, griffins, and peacocks, resembling the ornamentation of the *Jahangir Mahal* in the *Agra Fort*. On the centre of the fourth side which overlooked the *River Ravi* was a lofty pavilion, and on either side, at the corners, two chambers with elaborate Hindu columns. The buildings have undergone complete alteration for military purposes, but the two corner buildings could be restored. In the centre of the quadrangle was a garden and beneath the pavilions and colonnades, under-ground apartments for refuge from heat. The *Moti Masjid* was Jahangir's work, and, although of marble, has been converted into a Government treasury. The style of its architecture is plain, but of an interesting transitional period. The building has been somewhat repaired and means taken to protect the marble from the hauling about of heavy treasure chests.

4. In the reign of Shah Jahan the Palace was enlarged. A smaller *Khwabgah* was erected, west of that built by Jahangir. The building still exists, although altered to suit the purposes of a chapel. The garden and surrounding buildings also remain, but the latter have been converted into quarters greatly to the detriment of their marbles. In front of the *Khwabgah* is the *Arzghah*, where the *Omra* assembled every morning to receive the Imperial commands. Left, or west, of the *Khwabgah* were erected two buildings known as the *Shish Mahal*, or *Saman Burj*, and *Naulakka Pavilion*. The *Shish Mahal*, with its sparkling mosaics of glass, is celebrated as the place where the British sovereignty of the Punjab was formerly recognised by *Ranjit Singh*. The *Naulakka Pavilion* is a costly marble erection, inlaid with "*Pietra Dura*." A new gate was opened into the *Shish Mahal* for the Emperor's private use, called the *Hati Pul* gate (or *Hathiyar Paur*), now the only entrance to the Fort. In the centre

¹ Periplus says that in A.H. 147 (=760 A.D.) the Moslems greatly increased; when issuing from their hills, they obtained possession of Kirman, Peshawar, and all the lands adjacent; and that the *Raja of Lahore*, who was of the family of *Ajmir*, sent his brother against these Afghans who were reinforced by the tribes of *Khilji* of *Ghor* and *Kabul*, just become proselytes to Islam.

of the Fort enclosure Shah Jahan erected the *Diwan-i-am* since vandalised into a barrack, but the columns of marble and stone, and throne of the interior, are *in situ*, and the rooms at the back (with their marble dados and coloured frescos, considerably damaged by whitewash) are parts of the original structure. The northern front of the Palace extended some 500 yards along the banks of the river, which in Shah Jahan's time flowed under its walls. The whole wall surface was covered with elaborate designs in "Kashi," or tile mosaics, forming one of the most striking features of the Fort. Little is known by visitors of this tile work, as the space beyond the wall is sacred to the Commissariat Department, and not accessible to the public. It is well worth preservation; the designs include figures of men and animals, representations of the sun and zodiacal signs. Detailed drawings of some have been prepared under Lieutenant Abbott, R.E.

5. The Mogul buildings in the Fort were used by Ranjit Singh: the Shish Mahal became a reception-room, and he added on a number of buildings, not improving to its appearance. He also made the Hazuri Bagh outside to the west, and in its centre erected the marble pavilion, which, I believe, was originally the central feature of Jahangir's Tomb at Shahdara. Moorcroft visited Ranjit Singh at Lahore in May 1820, and his description of the Fort runs as follows¹ :—

"Lahore is surrounded by a brick wall, about 30 feet high, which extends for about 7 miles, and is continuous with the Fort. The latter, in which the Raja resides, is surrounded by a wall of no great strength, with loopholes for musketry. A branch of the Ravi washes the foot of its northern face, but it has no moat on either of the remaining sides. The Palace within this enclosure called the Saman Burj, which is of many stories, is entirely faced with a kind of porcelain enamel, on which processions and combats of men and animals are depicted. Many of these are as perfect as when first placed in the wall. Several of the old buildings are in ruins; others are entire, and throw into shade the meaner structures of more recent date. Ranjit Singh has cleared away some of the rubbish, and has repaired or refitted some of the ruined buildings of Jahangir and Shah Jahan, but his alterations have not always been made with good feeling or taste. The great square and buildings of the principal mosque have been converted into a place of exercise for his Sipahi infantry, and he has stripped the dome of Asaf Jah, the brother of Nur Jahan Begum, of its white marbles to apply them to the erection of some insignificant apartments in the garden of the mosque. The *Diwan-i-am* is a long apartment, supported by many pillars."

6. After the peace of 1846 the British troops were quartered in the fort, and since then the buildings have been so altered and destroyed as to attract little interest. A great deal may, however, be done to bring what remains of the old architecture into prominence by resuming charge of the best buildings as objects of interest, and by freeing them of their present occupants and excrescences. The various recommendations submitted to Government are embodied in pages XXIII and CLXXXVII of my Annual Report for 1881-82, and page CIX of the Report for 1882-83.

¹ Travels in the Himalayan Provinces of Hindustan, &c., by Mr. W. Moorcroft and Mr. G. Trebeck, from 1819—1825 A. D., London, John Murray.

Appendix M.

Golden Temple at Amritsar, Punjab.

1. Amritsar was founded in A.D. 1574 around a sacred tank from which the city takes its name "Pool of Immortality." The site granted by the Emperor Akbar to Ram Dass, the Guru of the Sikhs, became covered with temples and huts and was at first named Ramdasapur, from the founder. He made Amritsar the proper seat of his followers, the centre which should attract their worldly longings for a material bond of union, and the obscure hamlet with its little pool (General Cunningham tells me there was a village named "Chak" on the site) has grown into a populous city and the great place of pilgrimage of the Sikh people. In A.D. 1756 Prince Timur, the son of Ahmed Shah Durani, expelled the Sikhs from Amritsar, demolished the buildings, and filled the sacred reservoir with the ruins.

In A.D. 1762 the army of the Khalsa assembled at Amritsar, the faithful performed their ablutions in the restored pool, and the first diet or Gurumutta was held. The same year Ahmed Shah destroyed the renewed temples and polluted the tank with the blood of cows. In A.D. 1764 the Sikhs became masters of Lahore, the chiefs again assembled at Amritsar, proclaimed their own sway, and rebuilt the temples.¹

2. In A.D. 1802 Ranjit Singh repaired the principal buildings and roofed the temple with sheets of copper gilt.

3. The Tank, as it now exists, is about 500 feet square, and fed by the old Hasli Canal. The Golden Temple stands on a platform in the centre, and is approached by a pier, at the end of which is the Darshani Door or "Gate of Sights." The Tank is surrounded by bangahs, i.e., dwellings for visitors and pilgrims. To the east is a garden with several fountains, called the Guruka-Bagh made in A.D. 1588, and due south of this the Kaulsar Tank, 410 by 170 feet. Further east stands the tomb of Baba Atal (built in A.D. 1628). The whole place is full of interest although so comparatively modern. In repairing the Golden Temple, Ranjit Singh used many of the inlaid decorations and marbles carried away from the tomb of Jahangir and other Muhammadan monuments at Lahore. It is stated in the official list of buildings of interest published by the Punjab Government in 1875, that the design of the temple repaired by Ranjit Singh was borrowed from the shrine of the Muhammadan Saint Mian Mir, near Lahore (1635 A.D.).

4. At the request of Sir Robert Egerton, the late Lieutenant-Governor, I had a careful survey made of the Tank and buildings. It will therefore be more fitting to postpone a detailed description. The architecture is an adaptation of Muhammadan styles, flavored with a good deal that is of Hindu tradition. Birds and animals are introduced in the marble mosaics, and mythological scenes are depicted in the paintings of the interiors. A peculiar flat arch is of frequent use in the façades, and seems to have been universal in Sikh buildings and tombs.

Illustrations of the Doors of the Darshani Gate.

No. 1.—Engraving of the Plan and Elevation (Double Plates.)

Nos. 2-4.—Chromolithographs of Details of Wood and Ivory (Single Plate.)

No. 5.— Ditto Ditto (Double Plate.)

5. The doors of the Darshani Gate are of shisham wood, the front overlaid with silver, the back inlaid with ivory. The silver plated front is ornamented

¹ See Captain Cunningham's *History of the Sikhs*: London, 1849.

with panels only. The back arranged in square and rectangular panels with geometric and floral designs, in which are introduced birds, lions, tigers, and deer. Some of the ivory inlay is coloured green and red, the effect being extremely harmonious.

6. In January 1881, when I first visited Amritsar, I noticed the mosaics to be suffering from dirt and neglect, and recommended their being periodically cleaned and kept from cracking by careful oiling.

7. The earliest specimen of oriental marquetry that I know occurs in the famous Somnath Gates, now in the Agra Fort. The elaborate Saracenic patterns on them prove that even if the wood frames were originally in the Somnath Temple, they must have been re-carved by Mahmud of Ghazni. They date, at all events, from the early part of the eleventh century, and having been recently cleaned are discovered to be really of sandalwood.

Mr. Fergusson writes—

"The carved ornaments on them are so similar to those found at Cairo in the Mosque of Ebn Touloun (A.D. 885) and other buildings of that age, as not only to prove they are of the same date, but also to show how similar were the modes of decoration at these two extremities of the Moslem Empire at the time of their execution."

8. The wooden *mimbar* or pulpit in the mosque of Qous, Cairo (twelfth century A.D.) and the marquetry in the *Mehrab* of the mosque of Nesfy Qeyçoum also at Cairo (fourteenth century A.D.) are inlaid with ivory, the geometrical and floral patterns, which are most elaborate and beautiful, resembling Indian work of the same class.

9. The doors of the mosque of Kharrete at Samarkhand (the building dates before 1405 A.D. when Tamerlane died) are of wood inlaid with ivory, in patterns very Indian in design, and as we know Tamerlane to have been much struck with Indian architecture when he invaded India in A.D. 1398, and to have carried off Indian workmen from Delhi to Samarkhand, it is probable that examples of marquetry existed there before the fourteenth century.

10. The earliest existing specimens of Indian marquetry I know are at Ahmedabad and Bijapur. The wooden canopy over Shah Alam's tomb (A.D. 1475) at the former place being handsomely incrustated with mother-of-pearl. The doorways of the Ashar Mahal (A.D. 1580) at the latter place are inlaid with ivory.

11. The canopy over Sheik Salim Chisti's tomb (A.D. 1581) at Fatehpur-Sikri is of wood covered with tesserae of mother-of-pearl.

12. The doorways in the Amber Palace (A.D. 1630) near Jaipur are of wood variously ornamented with—

I.—Carved panels.

II.—Inlays of ivory.

III.—And small lozenges of ivory which are incrustated with what is known as Bombay inlaid work. Unfortunately these doors are very much neglected and falling to ruin.

13. The doors of the Bari Mahal (A.D. 1711) at Udaipur are of another species of marquetry, some being ornamented with small panels of wood overlaid with ivory, like the modern work done at Vizagapatam, only in far better taste.

14. The inlaid work of Bombay was imported from Shiraz and Persia, and is the least effective of any of the Indian wood inlays being extremely minute and monotonous in design.

15. The modern Hoshiarpur work resembles that in the Darshani Gate. It is a promising and rising art manufacture and could derive material for new patterns from the examples above quoted.

Appendix N.

Badshahi Sarai at Nurmahal, near Jalandhar.

(The illustrations are from Photographs reproduced by Heliogravure.)

1. The following description is given by Major General Cunningham, Director General of the Archaeological Survey (see Report, Vol. XIV) :—

"The small town, Nurmahal, in the Jalandhar Doab, was named after the famous Empress of Jahangir, and in honour of her the Badshahi Sarai was built of unusual size, and with two highly-ornamented stone gateways. Nurmahal is situated 25 miles to the east-south-east of Sultanpur, 16 miles to the south of Jalandhar, and 13 miles to the west of Phalor * * *. The Sarai is 551 feet square outside, including the octagonal towers at the corners. The western gateway is a double-storeyed building, faced on the outside with red sandstone from the Fatehpur-Sikri quarries. The whole front is divided into panels ornamented with sculpture * * *. There are angels and fairies, elephants and rhinoceroses, camels and horses, monkeys and peacocks, with men on horseback and archers on elephants * * *. There was also a similar gateway on the eastern side, but this is now only a mass of ruin, and all the stone facing has disappeared * * *. On the north side of the courtyard there is a masjid, and in the middle a fine well. On each side there are 32 rooms, each 10 feet 10 inches square, with a verandah in front * * *. The Emperor's apartments formed the centre block of the south side, three storeys in height. The rooms were highly finished, but all their beauty is now concealed under the prevailing whitewash."

PLATE No. 1.—Side view of the west gate from the south.

PLATE No. 2.—Front view of the west gate.

2. The west gate is with its minarets 60 feet high, and has a frontage of about 62 feet. The inscription over the doorway relates that the building was commenced in A.H. 1028=A.D. 1618, and finished in A.H. 1030=A.D. 1620. It is a handsome specimen of Jahangir's architecture, and a singular instance of how figures and animals were tolerated by the Mogul ruler. There is no other Muhammadan building in India so freely ornamented with such carvings. The projecting balcony windows on each side of the entrance are of graceful design, with pillars and brackets in the Hindu style.

3. In July 1881 Sir Robert Egerton, the late Lieutenant-Governor of the Punjab, ordered the building to be repaired. I visited it in February 1882, had it surveyed and photographed, and on the 19th of June submitted plans and drawings to the Punjab Government, showing how the structure should be treated so as to follow the old architectural lines. In January 1883 I visited Nurmahal, with Mr. Harrington, the Executive Engineer of Jalandhar, and Lieutenant Abbott, the Assistant Engineer, Archaeological Sub-division. The structure had been rendered secure and the carved masonry of the façade was in process of repair. Since then the work has been completed, and the approach road improved.

4. The Nurmahal Sarai shows in what luxury the Mogul Emperors travelled. There are many such halting places on the old road from Delhi through Lahore to Kashmir, the following being some of those best known :—

I.—Sarai at Palwal (Gurgaon District), 300 years old.

II.—Wazir Khan's Sarai at Karnal, A.H. 1108=A.D. 1696.

III.—Badshah Sarai Gharaunda (Karnal District), A.H. 1048=A.D.

- IV.—Kabul Bagh, Panipat, A.H. 934 = A.D. 1527.
 V.—Smalka Sarai near Panipat (Shah Jahan's time).
 VI.—Sarai Lashkari Khan (Ludhiana District), Aurangzib.
 VII.—Nurmahal Sarai }
 VIII.—Dakhni Sarai } { Jahangir's time.
 IX.—Sultanpur Sarai } { Shah Jahan's time.
 X.—Fatehabad Sarai (Amritsar District), A.D. 1574. { (Early Muhammadan.)
 XI.—Nur-ud-din Sarai " "
 XII.—Sarai Amanat Khan " "
 XIII.—Tank, summer-house and tower near Shekopura (Gujranwala District), Jahangir's time.
 XIV.—Naurangabad Sarai (Gujrat District), Aurangzib's time.

The following are of Shah Jahan's time:—

- XV.—Yungnari Sarai, Kashmir, 35 miles south of Srinagar.
 XVI.—Hirpur Sarai " 24 " "
 XVII.—Shahji Murg Sarai " 14 " "
 XVIII.—Khanpur Sarai " 10 " "
 XIX.—Baramula Sarai " 28 miles north west of Srinagar.

No. I is in use for shops; No. II has only its gate remaining; No. III is not used, but a fine structure; No. IV, only the mosque remains, and the inscription recording Baber's defeat of Ibrahim Lodi; No. V is used; No. VI is used; No. VII is used; No. VIII is not used, but a fine building with tiles; Nos. X, XI, XII are converted into villages, and little left except the gateways; No. XIII, the tank very large, and buildings handsome; Nos. XV, XVI, XVII, XVIII and XIX are of stone, and still standing.

Appendix O.

*General description of the buildings surrounding the Kutub Minar.***Plate No. 1.—Plan of the Buildings at the Kutub.**

1. The Great Tower, called the Kutub Minar, stands 10 miles from Modern Delhi, and is surrounded by Hindu and Muhammadan ruins. Leaving Delhi by the Lahore Gate, the road passes the remains of the Jantar Manter, or observatory on the left and the mausoleum of Safdar Jang half-way to the Kutub on the right. The Jantar Manter was erected by Raja Jai Singh of Jaipur in the reign of Muhammad Shah, 1720 A.D., for astronomical purposes. It consists of several buildings which, having remained unused are in a state of ruin. The Tomb of Safdar Jang erected by Nawab Shuja-dulah, his son, was planned after the model of the Taj at Agra. It is of red sandstone, surmounted by a marble dome, and occupies the centre of a garden, 300 yards square. From here one passes several ruined tombs on both sides of the road, and enters the Kutub grounds under an old archway.

2. On the left is the dāk bungalow, where travellers can be housed for twenty-four hours. There are from here two roads, the chief continuing straight on through the northern part of the ruins, whilst the other diverges to the left and, passing between the two buildings of the dāk bungalow to the planted grounds, surrounds the Great Minar, and then rejoins the main road. The local authorities keep up this part of the ground about the Minar, as a garden. The cool shade of the trees and pleasant aspect of the ruins surrounded by turf are a refreshing relief after the dusty road from Delhi.

3. The earliest known city in the neighbourhood of the Kutub was that built by the Raja Dilu about 50 B.C., and was probably occupied by the Raja Dhava, who is said to have erected the Iron Pillar, standing in the court of the Kutub mosque. The Raja Anangpal rebuilt Delhi in A.D. 676, but in A.D. 1052 Anangpal II constructed Lalkot, the ancient walls of which may be seen to the east and north of the Kutub grounds. In A.D. 1180 the Raja Pithora built the Fort of Rai Pithora to surround the Fort of Lalkot on two sides, and to protect the Hindu city from the Muhammadans. The circuit of this city in the 12th century was about $4\frac{1}{2}$ miles and encompassed 27 Hindu temples built with beautifully carved pillars. It is probable that these temples were ranged about the ground surrounding the Minar. Some of the pillars still standing, particularly those behind Kutub-ud-din's arches at (4) on the plan, have the appearance of being in their original position. When the Muhammadans under Shahab-ud-din conquered and killed the Raja Pithora in A.D. 1193, the temples, and what is traditionally known as Rai Pithora's "Butkhana," or idol temple, were standing; however, Kutub-ud-din, the ennobled slave and commander of Shahab-ud-din's army, who was left as Governor of Delhi, overturned the buildings and is said to have constructed the Masjid out of the materials and pillars of the Butkhana. At present the natives regard the courtyard of the mosque as the original Butkhana. Kutub-ud-din built the great range of arches (4) to the west of the court, and there are inscriptions of his on the small gates to the north and east. Shams-ud-din Altamsh added the ranges of arches (3) and (5) outside the court to the north and south in 1229 A.D. The Minar (6) commenced by Kutub-

ud-din was finished by Altamsh in 1229 A.D. The tomb of Altamsh (2) was constructed by his daughter in 1235 A.D. In A.D. 1310 the Emperor Ala-ud-din built the gateway (10) and enlarged the area of the mosque to the north and east. He began a second tower or Minar (1), which is now a heap of rubble masonry. A small tomb (11) near Ala-ud-din's gate contains the remains of a Muhammadan Fakir, Syud Imam Zamin, and was built in A.D. 1537. The above-mentioned buildings have recently been enclosed by a fence, A, B, C, D, E, F, G, H, J, K, L, M, and the gate of Ala-ud-din (10) repaired. It still remains to clean all the carved masonry of the various buildings, so that inscriptions and tracery may be revealed. The original floor of the Butkhana, or court of the Kutub Mosque, is covered with earth and stone flags, which should be removed.

4. Outside the Kutub enclosure, and about half a mile south-east of the Minar, is the village of Mihroli, famous for the tomb and mosque of a Muhammadan Saint, Kutub Sahib, who died in 1236 A.D.; also for two large Baolis, or wells, one dating from 1052 A.D. and the second from 1263 A.D. Between the Kutub Minar and Mihroli is the tomb of Adam Khan (14), dating 1565 A.D., a building of great solidity, with a fine dome. It is at present used as a test-house by the district police officers, and is remarkably cool. A similar, but smaller, building to the south of the Kutub enclosure is the tomb of Muhammad Kuli Khan (12), built A.D. 1550. This was converted into a residence by Sir Theophilus Metcalfe, when Resident at Delhi, and is now a hotel. Beyond is the tomb and Mosque known as "Jamali Kamali," 1528 A.D., to which extensive repairs have been recently applied.

5. In overlooking the Kutub ruins as they exist, our principal historical interest lies in their being the record of the great Muhammadan invasion of India and the downfall of Hindu reign. Excepting where the materials of the pre-existing Hindu remains are used, such as carved pillars, brackets, lintels, &c., the buildings are the best of a few examples of highly ornamented Pathan architecture, and form a powerful contrast in their massiveness and vigour to the refined and elegant architecture of the succeeding Muhammadan rulers—the Moghuls—the builders of the sumptuous Taj at Agra and the Fort and palaces of Shahjahanabad.

6. Annexed is a classified list of the more remarkable monuments of antiquity in the Delhi neighbourhood. Those that have not already been cared for should be indicated by *notice boards, rendered accessible by roads and paths, and cleared of squatters, villagers, and their cattle*. I have marked and classified them according to the orders issued by the Governor General in Council in November 1883, as under:—

- I.—Those which, from their present condition and historical or archaeological value, ought to be maintained in permanent good repair.
- II.—Those which it is now only possible or desirable to save from further decay by such minor measures as the eradication of vegetation, the exclusion of water from the walls, and the like.
- III.—Those which, from their advanced stage of decay or comparative unimportance, it is impossible or unnecessary to preserve—
 - (a) in charge of Government,
 - (b) in charge of private individuals.

Besides the monuments mentioned in the list there are many others lying scattered around Delhi, the history of which remains to be unravelled, whilst explorations may reveal antiquities of surpassing interest. There is scarcely any spot of equal interest in India.

CLASSIFICATION OF THE DELHI MONUMENTS.

AT THE KUTUB.

IN AND AROUND DELHI.

Buddhist.

1. Asoka's Pillar in Firoz Shah's Kotla, B.C. 250, Ia.
2. Asoka's Pillar on the ridge near Hindu Rao's house, B.C. 250, Ia.

Hindu.

3. Iron Pillar, A.D. 310, Ia (7 on plan).
4. Anekpur Bund, 1051 A.D., 3 miles south of Tughlacksbad, Ia.
5. Fort of Lalkot, 1060 A.D., surrounding the Kutub, Ia.
6. Suraj Kund, 1061 A.D., south-east of Tughlacksbad, Ia.
7. Kila Rai Pithora, 1180 A.D., east of the Kutub, Ia.

Muhammadan.

GHORI PATHAN.

8. Masjid-i-kutab-ul-Islam, 1192-97 A.D., Ia (8 on plan).
9. Kutub Minar, 1229 A.D., Ia (6 on plan).
10. Altamsh's arches, 1229 A.D., Ia (3 & 5 on plan).
11. Altamsh's tomb, 1235 A.D., Ia (2 on plan).
12. Kutub Sahib's mosque and tomb, 1236 A.D., Ia (in Mahroli).
11. Hauz Shamsi, 1229 A.D., near Mahroli, Ia.
12. Sultan Ghori's tomb, 1231 A.D., 34 miles north-west of Kutub, Ia.
13. Tomb of Balban, 1281 A.D., in Kila Rai Pithora, Ia.
14. Palace at Kilkheri, 1286 A.D., south of Humayun's tomb, Ia.

KHILJI PATHAN.

15. Ala-ud-din's gateway, 1310 A.D., Ia (10 on plan).
16. Ala-ud-din's unfinished Minar, 1311 A.D., Ia (1 on plan).
17. Hauz Khas, 1295 A.D., 2 miles north of Kutub, Ia.
18. Siri or Kila Alai, 1304 A.D., 2 miles north-east of Kutub, Ia.
19. Lali Mahal, 1310 A.D., near Nizam-ud-din's tomb, Ia.
20. Ala-ud-din's tomb, 1317 A.D., south of Siri, Ia.

TUGHLACK PATHAN.

21. Nizam-ud-din's Baoli, 1321 A.D., near Nizam-ud-din's tomb, Ia.
22. Tughlacksbad, 1321 A.D., 5 miles east of Kutub, Ia.
23. The Pool Khirku's tomb, 1321 A.D. (re-built 1605 A.D.) at Nizam-ud-din's, Ia.
24. Nizam-ud-din's tomb, 1321 A.D. (repaired and altered), Ia.
25. Adilabad, 1325 A.D., near Tughlacksbad, Ia.
26. Jahan Panah, 1325 A.D., between the Kutub and Siri, Ia.
27. Biji Manni, 1325 A.D., 2 miles north-east of Kutub, Ia.
28. Firoz Shah's canal (now the Western Jamma Canal), 1351 A.D.
29. Firozabad, 1351 A.D., south of Delhi, Ia.

Classification of the Delhi Monuments—continued.

AT THE KUTUB.

IN AND AROUND DELHI.

TUGHLACK PATHAN—contd.

32. Jamath Khana Mosque, 1353 A.D., at Nizam-ud-din's, Ia.
33. Tomb of Chiragh Delhi, 1356 A.D., 3 miles north-east of Kutub, Ia.
34. Palace of Khusak Shikari, 1357 A.D., on the ridge, Ia.
35. Firoz Shah's Kotla, 1380 A.D., south-east of Delhi, Ia.
36. Kalan Masjid, 1387 A.D., in Delhi, Ia.
37. Begumpur Masjid, 1387 A.D., 12 miles north-east of Kutub, Ia.
38. Khirki Masjid, 1387 A.D., 2 miles east of Kutub, Ia.
39. Tomb of Firoz Shah, 1389 A.D., 2 miles north of Kutub, Ia.

AFGHAN.

40. Tomb of Mubarak Shah, 1432 A.D., in Mubarakpur, near Safdar Jang, Ia.
41. Tomb of Bahlol Lodi, 1488 A.D., at Chiragh Delhi, Ia.
42. Moth-ki-Masjid, 1488 A.D., 3 miles north of Kutub, Ia.
43. Basti Baori, 1488 A.D., at Nizam-ud-din's Tomb, Ia.
44. Shrine of Yusuf Kutub, 1488 A.D., near Khirki, Ia.
45. Sikandar Lodi's Tomb and Mosque, 1517 A.D., Ia. } in Khairpur,
46. Ibrahim Lodi's Tomb, 1526 A.D., Ia. } near Safdar Jang.
47. Jamali Kamali Mosque and Tomb, 1528 A.D., Ia (15 & 16 on plan).
48. Purana Kila, 1533 A.D., 2½ miles south-east of Delhi, Ia.
49. Inam Zamin, 1537 A.D., Ia (11 on plan).
50. Shir Mandil, 1540 A.D., in Purana Kila, Ia.
51. Kila Kona Mosque, 1540 A.D., in Purana Kila, Ia.
52. Lail Darwaza, or Rahul gate, 1540 A.D., south of Delhi gate, Ia.
53. Salimgarh, 1546 A.D., Ia.
54. Mosque and Tomb of Iza Khan, 1547 A.D., near Arab Serai, Ia.
53. Tomb of Muhammad Kuli Khan, 1550 A.D., Ia (Metcalfe House) (12 on plan).
56. Tomb of Adam Khan, 1565 A.D., Ia (14 on plan).

MOGUL.

57. Humayun's Tomb, 1554 A.D., 4 miles east of Delhi, Ia.
58. Arab-ki-Serai, 1560 A.D., III.
59. Nih Chattri, 1565 A.D., midway between Purana Kila and Humayun's Tomb, Ia.
60. Tomb of Anam Khan, 1566 A.D., near Nizam-ud-din, Ia.
61. Bara Palla, 1611 A.D., south of Humayun's Tomb, Ia.
62. Nili Buri, 1624 A.D., near Humayun's Tomb (Baber's Tomb), Ia.
63. Channath Khamba, 1624 A.D., at Nizam-ud-din, Ia.
64. Khan Khannan's Tomb, 1626 A.D., near Humayun's Tomb, Ia.

Classification of the Delhi Monuments—concluded.

AT THE KUTUB.

IN AND AROUND DELHI.

MOGUL—contd.

65. Shahjahanabad, or Modern Delhi, 1638 A.D., Ia and Ib.
66. Roshunara Bagh, 1650 A.D., outside Delhi, to the west, Ia.
67. Begam's Bagh, 1650 A.D. (Queen's Gardens), Ia.
68. Tomb of Jahanara Begam, 1681 A.D., at Nizam-ad-din's, IIa.
69. Bhulbhulioja, 1681 A.D., north of Lahore Gate, IIa.
70. Jantar Mantar (Observatory), 1724 A.D., IIa.
71. Tomb of Muhammad Shah, 1748 A.D., at Nizam-ad-din's, IIa.
72. Qudsiah Bagh, 1748 A.D., west of Delhi, Ia.
73. Lall Bangla, 1750 A.D., west of Purana Kila, IIa.
74. Tomb of Safdar Jang, 1733 A.D., Ia.

Appendix P.

Diwan-i-Am in the Fort, Delhi.

1. Entering the Delhi Fort by the Lahore Gate one traverses a long and handsome red sandstone arcade, all that now remains of the fine entrance to the Palace. A large open court lay beyond, from which extended, right and left, noble double-storied bazaars. One of these led to the Delhi Gate, the other to the Haiyat Baksh Garden. Immediately in front stands the Nakar Khana, or band-house. Passing beneath its archway one reaches the Diwan-i-am, once surrounded by the second court of the Palace. Further towards the river front came a garden, and then, right and left, small courts connected by galleries, enclosing the private buildings of the Palace. Of these, the king's Baths, the Pearl Mosque, the Saman Burj, the Diwan-i-Khas, and the Rang Mahal alone remain. Every other structure of importance has been swept away to make room for barracks.

PLATE No. 1.—Chromolithograph of the Mosaic Work at the back of the Marble Throne in the Diwan-i-Am (Double Plate).

PLATE No. 2.—Chromolithograph of the Mosaic of Orpheus (Single Plate).

PLATE No. 3.—Diagram showing the condition of the Mosaics after the mutiny (Single Plate).

2. The Diwan-i-Am, 179 feet 2 inches long by 68 feet wide, is supported by 60 columns of red sandstone, with cusped archways. The total height of the building is 36 feet 6 inches. The pavilion is open at three sides, the throne occupying the centre of the fourth or north side. The wall of the small raised apartment behind the throne is covered with mosaics in panels of black marble, surrounded by floral scrolls on white marble. This is the only example of black marble mosaic that I know of in India, and there can be little doubt its introduction is due to Austin de Bordeaux, who was in high favour with Shah Jahan. Bernier, the traveller, writing from Delhi in A.D. 1663, says the Frenchman designed the famous Peacock Throne formerly in the Diwan-i-Khas.

3. I learn from General Cunningham that before the mutiny, the mosaic here represented was in a neglected state, and stones had then been extracted, possibly by the native guards of the Palace. Greater damage was, however, done at the mutiny, when Captain Jones (afterwards Sir John Jones) removed eleven of the black marble plaques, four being large and seven small panels, which he had set in a marble-table top. He also extracted the figure of Orpheus and sold all twelve pieces to the British Government for £500. The position of the five larger pieces is shown in Plate 3, numbered I to V.

4. I had careful full-size water-colour paintings made of these twelve plaques (now with the Indian Art Collection at South Kensington), which, with drawings of others made for Prince Soltykoff at Delhi before the mutiny, some lent by General Cunningham and some obtained at Delhi, have enabled me to completely restore the original design. A full-size tracing was made of the wall, showing—

- I.—The mosaic as restored after the mutiny in painted plaster or lac.
- II.—The marble plaques that are still in the wall.
- III.—The missing marble plaques and their position.

Colonel M. Hunter, who commanded the troops at Delhi, gave me great assistance in procuring information.

5. The chromolithograph shows the original design, and the drawing representing Orpheus fiddling to the beasts is a faithful copy from the original mosaic. According to tradition Orpheus is a portrait of Austin de Bordeaux, who directed the design and work in A.D. 1648.

6. The actual drawing and rendering of the mosaics is no doubt due to native artists. The birds and animals are common in India, and the foliated patterns are similar to those of Jahangir's and Shah Jahan's period.

7. The painted portions are being gradually replaced by marble mosaic under the orders of the Punjab Government, and I venture to express the hope that the twelve plaques removed by Sir John Jones will be restored to their original places.

Appendix Q.

The Diwan-i-Khas in the Delhi Fort.

1. This handsome pavilion, overlooking the River Jumna on the east face of the Delhi Fort, is built of white marble, 240 feet long by 78 feet wide, and raised on a marble terrace, 4½ feet high. On each of the four corners of the roof is a kiosk surmounted by a marble dome, which, like the cupolas of Shah Jahan's Agra palaces, was originally plated with copper gilt. The sheets of copper were taken by a Prize agent after the Delhi siege in 1857, on the plea of being movable property!

2. The interior decorations are very beautiful. Mr. Fergusson classes the hall as "certainly the most highly ornamented of Shah Jahan's buildings."

3. The plan consists of a central apartment surrounded by an open corridor. The side of the hall overlooking the river is fitted with a marble screen, now glazed. A water channel passes under the marble floor in the centre of the hall. A flat roof with a coving of marble rests on 32 piers spanned by cusped arches. The outline and proportions are in the best style of Mogul architecture. The lower portions of the piers are inlaid with Pietra Dura. The upper portions, as well as the arches, soffits, spandrels, and coving of the ceilings, are covered with gilded patterns and tracery. The ceilings of both centre room and verandahs are of wood with mouldings dividing the surface into equal and similarly shaped lozenges, in the centre of which are red roses highly gilt.

4. Franklin, who visited Delhi in 1793, says of this pavilion: "The ceiling is of wood, painted red, and richly decorated with gold; it was formerly encrusted with a rich silver foliage, inlaid with gold, at an expense of 39 lakhs of rupees. The Mahrattas took it down, and on sending it to the mint to be coined, obtained 28 lakhs. On a compartment over the cornice are these lines in the Persian character in letters of gold: 'If there is a paradise on earth it is this, 'tis this, 'tis this.' The roof is surmounted at the angles with four pavilions, the ornaments of brass on the cupolas being richly gilt."

PLATE No. 1.—Ceiling of the Diwan-i-Khas (Chromolithograph—Double Plate).

5. The central apartment of the Diwan-i-Khas had its ceiling re-painted in 1876, in preparation for the visit of His Royal Highness the Prince of Wales. The renewal was badly done, the moulded fretwork being re-painted in black, red, and gold, instead of the original pattern, and the central rose converted into a sort of starved starfish, the effect being extremely harsh and glaring. Fortunately the outer corridor has the design of its ceiling intact. The woodwork is somewhat decayed, the colours faded, but the delicacy of the pattern is in harmony with the decoration of the marble portions of the building and in the same style.

6. From what is known of Aurangzib's architecture it is unlikely he put up or decorated the ceiling as it now is. His successors allowed buildings to fall into neglect, and both Nadir Shah and the Mahrattas were destroyers, not repairers. Putting other evidence aside, the appearance of the ceiling affords pretty conclusive grounds for assuming it to be of Shah Jahan's time. This consideration should have weight in rendering the roof secure. It is found that the beams of the ceiling have got decayed and the superincumbent concrete probably rests as a solid mass. I think any repairs should leave the ceiling intact. To the majority of visitors the Diwan-i-khas is the chief beauty of Delhi.

Appendix R.

Tomb of Itmad-ud-Dowlah, Agra.

1. The tomb of Itmad-ud-dowlah is not only one of the finest buildings at Agra, but, after Akbar's tomb at Sikandra, is the second Agra building, in which Pietra Dura mosaic plays an important part. It was completed in A.D. 1626 by Nur Mahal, daughter of Itmad-ud-dowlah, and wife of the Emperor Jahangir.

2. Mr. Keene states that Itmad-ud-dowlah died in A.D. 1622, and that a garden house of his had probably existed during his lifetime on the site of the tomb.

3. The Mausoleum is 60 feet square, faced externally with white marble covered with mosaics of geometrical tesserae and floral patterns. The outer walled enclosure, 540 feet long on each side, contains the garden recently put in good order.

PLATES Nos. 1 to 3.—Details of Painted Decoration (Chromo'lithographs—Single Plates).

4. In the centre of the front, towards the River Jumna, is a red sandstone building, 67 feet long, formerly used by Europeans, but now freed of the doors and windows inserted to make the pavilion habitable. It is in the ceilings of this structure that the painted fresco decorations are to be seen. The whitewash which covered them has been removed by the Government of North-West Provinces, but the patterns might with advantage be re-outlined and revived in parts.

5. In a report dated May 1880, I submitted a recommendation that the beautiful paintings of the interior of the tomb should also be cleaned and revived.

6. Painted decorations were used by Indian architects from the commencement of the Christian era, but their perishable nature and the rough treatment of the buildings, particularly by cooking fires, have left very few examples in a fair state of preservation.

7. Commencing from the first century A.D., we know of the Buddhist sculptures found in the Yusafzai district having been coloured and gilded. I have myself found plaster figures on which the colour was quite fresh, and stone carvings with remains of gold leaf on their surfaces.

8. The well-known caves at Ajanta were most elaborately painted with Buddhist scenes. The earlier caves are of this date. The paintings copied first by Major Gill, and latterly under the direction of Mr. Griffiths, of the Bombay School of Art, have served as patterns for the decoration of the new Bombay pottery.

9. There is a lack of examples of architectural painted decoration from the Ajanta period down to the 13th century, when the Muhammadans built the Alhambra in Spain and adorned it with highly moulded and coloured plaster arabesques.

10. The early Moslem Emperors of Delhi built tombs and mosques of great solidity, and carved the decoration on the stone; but painting was also used, as may be seen in portions of the tomb of Shams-ud-din (A.D. 1236) at the Kutub.

11. The beautifully-illuminated korans, dating from the 14th century A.D., found at Cairo, show how the love of coloured arabesque had developed.

12. Coloured frescos occur in Bokhara buildings (of Tamerlane's reign, before 1405 A.D.) and are a mixture of Indian Muhammadan, Chinese, Tartar, and Russian ornament.

13. The following are some of the principal examples of mediæval Indian paintings:—

- I.—Interior of the dome of Shah Alam's tomb at Ahmedabad, 1475 A.D.
- II.—Walls in Man Singh's Palace at Gwalior, 1507 A.D.
- III.—Ceilings in the Kila Kona Mosque at Delhi, 1540 A.D.
- IV.—Beautiful Mehrab, or Chapel, in the Jama Masjid, Bijapur, 1557 A.D.
- V.—Archway to the great Mosque at Fatehpur Sikri, 1571 A.D. (This has been recently restored by the Government of the North-Western Provinces. Abal Fazl tells us that Akbar imported painters from Tabriz and Shiraz, in Persia.)
- VI.—Vestibule of Akbar's tomb, Sikandra; also the archway of the west gateway, 1613 A.D. (These have been partially restored by the Government of the North-Western Provinces.)
- VII.—Trimal Nayakkan's Palace and Temples at Madura, in Madras, 1623 A.D.
- VIII.—Frescos in Wazir Khan's Mosque at Lahore, 1624 A.D. (These have been damaged by clumsy repairs done by the native custodians.)
- IX.—Interior of Itmad-ud-dowlah's tomb at Agra, 1628 A.D.
- X.—Corridors of Jahangir's tomb at Lahore, 1628 A.D.
- XI.—Ceiling of the Khas Mahal, Agra Fort, 1630 A.D.
- XII.—Shah Jahan's painted ceilings in the Shalimar Gardens, Kashmir, 1640 A.D. (These are mentioned by Sir Thomas Roe in 1699.)

Appendix S.

List of Græco-Buddhist Sculptures excavated in Yusufzai during the winters of 1883 and 1884.

Place.	Index No.	No. of boxes or pieces.	Dimensions of box or piece.	SCULPTURE.	Donor's name.
Sanghao Monastery	1	1	2' 2" x 9"	3 fragments, seated Buddhas.	Lahore Museum.
	2	2	2' 0" x 1' 5"	10 fragments.	
	3	3	1' 10" x 1' 4"	2 lions' heads and fore feet.	
	4	4	12" diam.	Disc of the upper part of a Tope.	
	5	5	1' 2" x 1' 1"	Head of a Prince with elaborate tree halo.	
	6	6	12" diam.	Capital of a pillar.	
	7	7	2' 1" x 1' 5"	3 figures of woman and eagle (1 from Upper Nuttu) and 1 knob.	
	8	8	2' 0" x 1' 7"	3 small chapels and 1 lotus of earthenware.	
	9	9	2' 5" x 1' 0"	11 portions of friezes.	
	10	10	1' 6" x 6"	3 portions of a frieze with pilasters.	
	11	11	1' 7" x 9"	4 crouched figures (like Caryatides).	
	12	12	2' 0" x 1' 4"	12 parts of friezes.	
	13	13	2' 6" x 1' 10"	9 panels of seated Buddhas with pilasters.	
	14	14	2' 10" x 1' 5"	11 heads of lions, 2 of an elephant.	
	15	15	2' 7" x 1' 4"	5 panels, 3 seated Buddhas, Buddha and Uruvilwa, and the death of Buddha.	
	16	16	1' 9" x 1' 8"	11 parts of friezes.	
	17	17	5' 0" x 8"	17 parts of friezes, separated by pilasters, with birth of Buddha, Buddha and Nagas, and other scenes.	
	18	18	18" x 8"	Part of a capital.	
	19	19	2' 0" x 8"	Base of a throne or altar.	
	20	20	2' 7" x 1' 5"	2 discs of tree or stone umbrella.	
	21	21	3' 3" x 1' 1"	5 stone fragments, nails, hinges, earthenware cup and bones.	
Nullah Tope, near Sanghao.	22	1	1' 7" x 4"	Side of a niche or chapel, carvings of cupids.	Lahore Museum.
	23	2	2' 4" x 12"	5 fragments of figures.	
	24	3	1' 8" x 1' 4"	2 pieces, Prince and attendants around Buddha.	
	25	4	1' 6" x 1' 5"	2 fragments.	
	26	5	2' 2" x 7"	3 fragments, castle and figures, Buddha and women.	
	27	6	7' 11" x 1' 1"	Side of a niche (very perfect), panels of seated and standing Buddhas, sides with panels of pairs of cupids.	
	28	7	3' 0" x 7"	5 pieces of a frieze, figures in niches separated by pillars.	
	29	8	2' 0" x 1' 8"	6 heads, lower part of a throne and part of a rail ornament.	
	30	9	2' 7" x 2' 0"	Upper part of niche (in 3 pieces), Prince and women, &c.	
	31	10	1' 5" x 11"	2 pieces, one representing a coffin on an altar with surrounding figures.	
	32	11	2' 5" x 1' 1"	Part of the side of a niche, like No. 27.	
	33	12	3' 0" x 7"	4 pieces of a frieze, figures in niches with intermediate pillars.	
	34	13	2' 5" x 8"	3 heads, 1 seated Buddha.	
	35	14	1' 2" x 7"	2 fragments.	
	36	15	1' 2" x 10"	2 fragments.	
	37	16	2' 5" x 1' 2"	5 pieces, moldings, cornices.	
	38	17	2' 7" x 1' 1"	7 fragments, 1 disc, nails of iron.	
	39	18	1' 0" x 7"	Small panel, man on horseback.	

Place.	Index No.	No. of boxes or pieces.	Dimensions of box or piece.	Object.	Determination.
Parkah Ruins, near Sanghao.	40	1	21" x 10"	5 fragments and some iron cramps	Lahore Museum.
Kotah Dwellings, near Sanghao.	41	1	1' 2" x 10"	13 pieces of earthenware pottery, lamps, lotahs, &c.	
Jao Ruins, near Sanghao.	42	1	2' 1" x 1' 2"	7 fragments.	
Mahomed Nari, near Hast Nagar.	43	1	about 4'	Figure of a Prince.	
Koi Tangi Monastery, near Mian Khan.	44	1	1' 10" x 10"	Panel of seated Buddha and seated attendants.	Imperial Museum, Calcutta.
	45	2	2' 6" x 10"	9 fragments of friezes.	
	46	3	2' 6" x 1' 1"	9 fragments of panels, similar to No. 44.	
	47	4	2' 4" x 2' 2"	4 fragments of a niche, gambling scene, elephant scene.	
	48	5	2' 10" x 7"	3 parts of a frieze, seated Buddhas and attendants.	
	49	6	2' 6" high	Half body of a Prince.	
	50	7	10" wide	Part of an acanthus capital with Buddha.	
	51	8	1' 6" x 1' 1"	5 fragments, including final of a tee.	
	52	9	1' 8" x 1' 3"	2 parts of a frieze, boys and garlands.	
	53	10	1' 9" x 1' 4"	2 parts of a frieze in high relief, Buddhas seated with attendants, separated by pilasters.	
	54	11	2' 6" x 10"	3 seated Buddhas.	
	55	12	2' 4" x 1' 2"	14 pieces, including 11 heads.	
	56	13	2' 7" x 9"	2 parts of a frieze, Buddhas, &c.	
	57	14	2' 3" wide	Part of a capital.	
	58	15	2' 6" x 10"	Panel (in two fragments), Buddha seated with attendants.	
	59	16	2' 2" x 8"	Panel—man struck down, horse, &c.	
	60	17	2' 3" x 8"	Parts of a panel, like No. 48.	
	61	18	2' 6" x 8"	3 parts of a frieze, Buddhas, &c.	
	62	19	about 2'	Seated figure.	
	63	20	1' 8" x 1' 2"	6 parts of a tee and a hand.	
	64	21	1' 5" x 12"	Seated Buddha.	
	65	22	1' 7" x 1' 1"	5 terminals of lions, &c.	
	66	23	1' 11" x 1' 3"	Seated Prince.	
	67	24	1' 4" x 1' 2"	Base of a statue, carved with panel of seated Buddha and attendants.	
	68	25	1' 8" x 1' 6"	4 fragments, including part of a wheel symbol.	
	69	26	1' 10" x 1' 5"	2 fragments, Buddha and Ummilwa.	
	70	27	1' 10" x 1' 9"	Coffin on an altar with attendants.	
	71	28	1' 9" x 11"	Worship of a Ram (fragment).	
	72	29	1' 4" x 9"	Seated Buddha.	
	73	30	1' 11" x 8"	3 fragments, Buddha and symbols.	
	74	31	2' 6" x 1' 6"	8 parts of friezes.	
	75	32	2' 4" x 1' 2"	7 pieces of a frieze of figures.	
	76	33	2' 6" x 1' 10"	8 parts of a frieze, figures under arches.	
	77	34	5' 4" x 10"	4 parts of a frieze, Buddhas and attendants.	
	78	35	1' 4" x 1' 1"	Seated Buddha.	
	79	36	3' 6" x 2' 0"	5 parts of a frieze, processions, Tupa worship, &c.	
	80	37	11" diam.	Upper disc of a Tupa.	
	81	38	1' 2" x 10"	Seated Buddha, &c.	
	82	39	1' 5" x 1' 2"	2 seated Buddhas.	
	83	40	1' 6" x 1' 1"	6 pieces of friezes.	
	84	41	1' 10" x 1' 7"	10 pieces of friezes.	
	85	42	1' 6" x 7"	Portion of a niche in high relief.	
	86	43	1' 4" x 11"	2 naked men and a woman.	
	87	44	1' 6" x 1' 4"	5 fragments.	

Place.	Index No.	No. of boxes or parts.	Dimensions of box or piece.	Inventory.	Destination.
Kot Tangi Monastery, near Mian Khan— <i>contd.</i>	88	45	2' 5" x 1' 3"	18 pieces of friezes.	Imperial Museum, Calcutta.
	89	40	1' 4" x 2'	Standing figure of Buddha.	
	90	47	12" high	Broken figure of Buddha.	
	91	48	1' 8" x 7"	Panel of Buddha, &c.	
	92	49	1' 11" x 6"	2 panels, death and worship of Buddha.	
	93	50	2' 1" x 10"	Seated Buddha and seated attendants.	
	94	51	2' 2" x 1' 10"	6 parts of a niche or chapel.	
	95	52	1' 4" x 7"	Figure of a Prince standing.	
	96	53	1' 4" x 1' 1"	Seated Buddha.	
	97	54	1' 2" x 12"	Seated Buddha.	
	98	55	2' 4" x 5"	3 panels, with birth, death, and worship of Buddha.	
	99	56	1' 10" x 1' 8"	8 fragments.	
	100	57	1' 3" x 10"	Part of a panel, worship of Buddha.	
	101	58	1' 11" x 10"	Parts of a panel, worship of Buddha.	
	102	59	2' 4" x 1' 8"	6 pieces of friezes.	
	103	60	4' 0" x 1' 1"	7 fragments.	
	104	61	4' 0" x 11"	3 panels, boys mounted on lions.	
	105	62	1' 6" x 10"	Part of the side of a niche.	
	106	63	2' 4" x 1' 1"	4 fragments, ascetics, Buddhas, bowl, &c.	
	107	64	1' 8" x 7"	Pilaster.	
	108	65	2' 11" x 1' 3"	Buddha seated.	
Upper Nattu Monastery, near Mian Khan.	109	66	2' 0" x 1' 11"	4 pillars, &c.	Imperial Museum, Calcutta.
	110	67	1' 4" x 1' 3"	5 fragments.	
	111	68	2' 2" x 0'	3 fragments.	
	112	69	1' 0" x 8"	2 heads.	
	113	70	2' 9" x 8"	3 fragments.	
	114	1	1' 4" x 5"	Perfect niche in 2 pieces, and 1 fragment of a panel.	
	115	2	3' 4" x 5"	7 pieces forming a frieze of figures.	
	116	3	1' 5" x 0'	Panel between pilasters, death of Buddha.	
	117	4	2' x 5"	Statue of a Prince.	
	118	5	2' 8" x 10"	3 friezes in 7 pieces, funeral pile, relic worship, &c.	
	119	6	3' 0" x 8"	Frieze of cupids and vine.	
	120	7	1' 11" x 12"	6 fragments.	
	121	8	11" diam.	Base of a pillar.	
	122	9	2' 4" x 11"	2 panels separated by a pilaster, 4 pieces, Buddha and attendants.	
	123	10	1' 6" x 11"	Seated figure of a Prince, holding a vessel.	Imperial Museum, Calcutta.
	124	11	2' 6" x 1' 6"	4 dancing women under trees.	
	125	12	1' 8" x 9"	Seated figure of a Prince, holding a vessel.	
	126	13	3' 2" x 12"	6 pieces various figures, and 8 crouched Caryatids.	
	127	14	2' 11" x 11"	2 panels and 3 pilasters, Buddhas and attendants.	
	128	15	3' 0" x 11"	2 panels and 3 pilasters, Buddhas and attendants.	
	129	16	1' 10" x 1' 15"	4 panels, symbol worship, Prince under canopy, seated Buddha and attendants, birth of Buddha.	
	130	1	2' 2" x 1' 3"	7 fragments.	
	131	2	1' 10" x 1' 10"	9 pieces forming a circular frieze, boys and garlands.	
	132	3	3' 4" x 9"	3 parts forming flanks of a niche, palace scenes.	
Lower Nattu Monastery, near Mian Khan.	133	4	2' 3" x 1' 5"	10 heads and 4 fragments.	Central Museum, Madras.
	134	5	2' 4" x 1' 6"	6 fragments of friezes, various designs.	
	135	6	2' 1" x 1' 10"	14 fragments of friezes, figures in niches separated by pillars.	
	136	7	9" x 6"	Part of a capital.	
	137	8	11" x 9"	Panel, seated Buddha and attendants.	

Place.	Index No.	No. of buddha or piece.	Dimensions of box or piece.	Subject.	Desti- nation.
Lower Nutra Mon- astery, near Mian Khan— <i>contd.</i>	138	9	2' 1" x 10'	2 panels, death of Buddha, symbol worship.	Central Museum, Madras.
	139	10	1' 11" x 1' 5"	11 fragments of friezes, various patterns.	
	140	11	3' 7" x 8"	Fragments of a frieze, seated Buddhas and at- tendants.	
	141	12	6" radius	Disc of a tree.	
Tope at Mala Tangi near Mian Khan.	142	1	3' 0" x 12"	Standing figure of Buddha.	Central Museum, Madras.
	143	2	3' 0" x 12"	Standing figure of a Prince.	
	144	3	2' 0" x 2' 0"	Centre of a niche, Buddha seated with symbol of the Tirchakra and attendants (very broken).	
	145	4	3' 9" x 2' 0"	Triangular box, containing 5 portions of a niche or chapel; in the upper portion, Buddha's bowl, his hair and turban, &c.	
	146	5	2' 0" x 8"	Cap of a pillar with acanthus leaves, chariot and four horses, with figures in the centre.	
	147	6	2' 0" x 8"	2 pieces of a circular frieze, with figures between columns.	
	148	7	1' 5" x 10"	Panel representing the birth of Buddha.	
	149	8	12" x 12"	2 fragments, Buddhas between palms, and Buddha and disciples.	
	150	9	2' 0" x 10"	Portion of the side of a niche or chapel in the centre, with figures of Buddha seated or standing and attendants at the sides, boys and figures looking out of balconies.	
	151	10	1' 5" x 6"	2 elephants and one lion.	
	152	11	1' 2" x 6"	Frieze of Prince Siddhartha on his horse and side figures.	
	153	12	1' 4" x 3"	Frieze of seated figures of Buddhas between trees.	
	154	13	1' 3" x 9"	Part of a niche, standing Buddhas and attendants in panels, capitals at the side.	
	155	14	10" x 10"	Part of the side of a niche, panels of seated Buddhas, capitals at the side.	
	156	15	2' 0" x 5"	3 bases of statues, and one head.	
	157	16	3' 2" x 10"	4 fragments of chapels.	
	158	17	3' x 12"	7 fragments of Buddhas and niches.	
	159	18	2' 0" x 1' 2"	2 circular discs and part of a third, from a tree.	
	160	19	2' 8" x 6"	4 crooked male figures or Caryatides.	
	161	20	2' 0" x 3"	2 pieces of a frieze of seated Buddhas under arched niches.	
	162	21	3' 0" x 3"	2 pieces of a frieze of figures, &c., under niches and between pillars.	
	163	22	12" x 10"	2 portions of a capital and cornice.	
	164	23	1' 10" x 1' 3"	4 fragments.	
	165	24	1' 0" x 6"	3 fragments of figures.	
	166	25	1' 10" x 1' 1"	9 fragments, mostly heads.	
	167	26	1' 0" x 11"	6 fragments, 2 heads.	
	168	27	1' 0" x 6"	Standing figure of Buddha.	
	169	28	2' 2" x 2' 6"	11 fragments.	
	170	29	1' 0" x 1' 4"	3 parts of a frieze, panels of Buddha seated with attendants with columns between.	
	171	30	1' 10" x 1' 6"	4 parts of a frieze, boys carrying garlands.	
	172	31	---	Several pieces forming the upper drum of a Tope.	
Marian Tope, near Mian Khan.	173	1	2' 6" x 6"	3 fragments of a frieze, boys carrying garlands.	V. & A. Mu- seum, Bombay.
	174	2	1' 4" x 1' 2"	Birth of Buddha (very perfect).	
	175	3	11" x 7"	Panel with 3 archways, Buddha leaving his home.	
	176	4	12" x 8"	Fragment of a panel, standing Buddha holding a lotus.	

Place.	Index No.	No. of bonds or pieces.	Dimensions of box or piece.	Summary.	Desti- nation.
Marjan Tope, near Mian Khan— <i>contd.</i>	177	5	13" x 9"	Part of side of a chapel, Buddha standing with attendants, cupids and people at balconies at sides.	Victoria and Albert Museum, Bombay.
	178	6	1 0" x 2"	Part of a cornice.	
	179	7	2' 0" x 1' 4"	Panel with death of Buddha between pillars.	
	180	8	2' 5" x 9"	Side of a niche with panels of figures, screwing flowers and in adoration, flanked by cupids.	
	181	9	1' 6" x 9"	Side of a niche, similar to 180.	
	182	10	2' 0" x 1' 4"	Fragment of a panel, seated Buddha with shaven monks.	
	183	11	2' 11" x 11"	Side of niche, same as 180.	
	184	12	2' 4" x 10"	Side of niche, same as 180.	
	185	13	11" x 8"	2 fragments, seated Buddhas.	
	186	14	1' 4" x 10"	Panel of death of Buddha.	
	187	15	2' x 1' 8"	6 parts of a frieze, seated Buddhas under arches.	
	188	16	1' 6" x 7"	Side of a niche, two sets of standing figures.	
	189	17	5" x 6"	Fragment of a panel Buddha teaching.	
	190	18	1' 2" x 12"	Upper portion of a niche, seated Buddha and attendants.	
	191	19	2' 9" x 5"	6 heads and figures.	
	192	20	11" x 9"	Panel in 3 fragments, Buddha seated, a child prostrate at his feet.	
	193	21	1' 5" x 11"	7 fragments.	
	194	22	1' 8" x 1' 1"	5 fragments.	
	195	23	1' 5" x 1' 3"	Panel of seated Buddha with 2 prostrate children at his feet, attendants and ogres.	
	196	24	2' 5" x 1' 4"	3 seated figures of Kings, 1 on a wicker stool and 2 fragments.	
	197	25	12" x 9"	Fragment of a panel, Buddha leaving his home.	
	198	26	2' 5" x 1' 11"	Part of a chapel in 8 fragments, Buddha and elephant, &c.	
Babusa Tope, near Mian Khan.	199	1	1' 10" x 12"	3 pieces of a circular frieze, containing the dream of Maya touched by the white elephant, death of Buddha, &c.	Victoria and Albert Museum, Bombay.
	200	2	1' 6" x 8"	2 pieces of a circular frieze, containing a seated Buddha.	
	201	3	1' 8" x 10"	1 piece of a circular frieze, containing 2 men on horseback and the worship of a Tope.	
	202	4	1' 8" x 1' 6"	2 pieces of a circular frieze, containing various scenes.	
	203	5	1' 10" x 1' 2"	3 fragments.	
	204	6	1' 1" x 12"	2 seated figures.	
	205	7	1' 8" x 1' 2"	Panel in 2 fragments, 2 scenes of Buddha standing on a raised platform with attendants.	
	206	8	1' 5" x 12"	Panel of a seated Buddha and attendants.	
	207	9	1' 6" x 1' 2"	Part of a figure of a Prince and a floral ornament.	
	208	10	1' 6" x 1' 2"	3 fragments of a chapel.	
	209	11	11" x 9"	Panel of Buddha and Nagas.	
	210	12	2' 2" x 1' 4"	3 seated Princes.	
	211	13	2' 0" x 10"	1 panel of a seated Buddha, 1 of a seated Prince.	
	212	14	3' 4" x 12"	3 fragments of a chapel.	
Chinglai Tope	213	1	11" x 9"	2 heads and 2 fragments of hands.	Rangoon Museum, Burma.
	214	2	1' 5" x 1' 1"	Panel between pillars, birth of Buddha (in 2 fragments).	
	215	3	2' 10" x 1' 10"	4 pieces of a circular frieze, Buddha and figures in niches between pillars.	

Place.		Index No.	No. of boxes or pieces.	Dimensions of box or piece.	Subjects.	Desi- gation.
Ching'ai caval.	Type—	216	4	2' 0" x 7"	Side of a niche, seated Buddhas and attend- ants—cupids.	Rangoon Museum, Burma.
		217	5	2' x 12"	Panel, Buddha leaving his home.	
		218	6	2' x 12"	Buddha's visit to Uruvilva, holding the Naga in his lotus.	
		219	7	1' 9" x 1' 2"	Panel of seated Buddha and attendants between pilasters.	
		220	8	1' 10" x 8"	2 fragments of a niche.	
		221	9	2' 2" x 9"	Part of a niche, seated Buddha and monks.	
		222	10	1' 10" x 6"	4 pieces of a frieze, figures in niches between pillars.	
		223	11	1' 8" x 1' 5"	3 pieces of a frieze, various scenes between pillars.	
		224	12	1' 2" x 9"	Panel representing a palace scene.	
		225	13	1' 3" x 1' 1"	Panel of seated Buddha and monks.	
		226	14	1' 2" x 12"	3 fragments and ston lamps.	
		227	15	1' 8" x 1' 3"	Panel between pilasters, representing the death of Buddha.	

Appendix T.

List of Plates for the "Buddhist Sculptures of Gandhara," under preparation by General Cunningham and Major Cole.

No. of Plate.	No. of Sheet, or <i>See the work</i>	DESCRIPTION.	No. in General Cunningham's List of Photo- graphs.	No. in Major Cole's Catalogue.
1	1	Map of Yutafai	...	...
2	1	Map of Jamalgarhi	...	...
3	1	Plan of Ruins at Jamalgarhi	...	...
4	1	Map of Takht-i-Bahi	...	...
5	1	Plan of Ruins at Takht-i-Bahi	...	...
6	1	Chapel at Takht-i-Bahi	...	...
7	1	View of Takht-i-Bahi ruins	...	...
8	1	Treasury at Myerzai, &c.	...	...
9	1	Plan and Sketch of the Raimat Fort	...	...
10	1	Pilaster from Ranigat	...	...
11	1	Plan of Monastery at Sanghao	...	...
12	1	Plan of a Buddhist House and Granary at Sanghao	...	...
13	1	Section through the domed Granary at Sanghao	...	...
14	1	Plan of Dwellings near Rhoda, Sanghao	...	...
15	1	Plan of a House and Granary at Rhoda, Sanghao	...	...
16	1	Plan of Monastery, Koi Tangi, Mian Khan	...	...
17	1	Plan of Lower Monastery, Nattu, near Mian Khan	...	...
18	1	Plan of Upper Monastery, Nattu, near Mian Khan	...	...
19	1	Plan of Monastery and Tōpe at Tangi, Sanghao	...	...
20	1	Basement and details of Tōpe at Tangi, Sanghao	...	...
21	1	Plan of Tōpe at Marjan, Mian Khan	...	...
22	1	Plan of Tōpe at Main Tangi, Mian Khan	...	...
23	1	Plan of Tōpe at Nullah, near Sanghao	...	...
24	1	Plan of Tōpe at Babutai, near Mian Khan	...	...
25	1	Plan of Tōpe at Chingial, near Sanghao	...	...
26	1	Plan of Ruins at Jui, Sanghao	...	...
27	1	Plan of Monastery at Kotah, Sanghao	...	...
28	1	View of a plaster-covered Tōpe at Ali Masjid	...	...
29	1	Sculpture from Mahmood Nari, part of a niche or chapel	...	...
30	1	Sculpture of a Tōpe, in the Lahore Museum	...	...
31	1	Sculptures from the Tōpe at Nullah	...	36-5
32	1	Capital and base of a pillar from Jamalgarhi	1-A-1	...
33	1	Capitals from Jamalgarhi	3-A-1	...
34	1	Capitals from Jamalgarhi, the largest 29 inches wide	5-A-1	...
35	1	Statues of Buddha from Jamalgarhi	16-A-1	...
36	1	Statues of Kings from Jamalgarhi	17-A-1	...
37	1	Statue of a King from Mahmood Nari, Lahore Museum	...	...
38	1	Statue of a King from Takht Bala, Lahore Museum	...	...
39	1	Statue of a King from Sahri Bahlol, Lahore Museum	...	...
40	1	Two figures in the Lahore Museum	...	...
41	1	Statue of Athene, Lahore Museum	...	...
42	1	Figure from the Upper Monastery at Nattu	...	40-6
43	1	Figure from the Monastery at Koi Tangi	...	95-52
44	1	Four sitting figures of Kings from Jamalgarhi	18-A-1	...
45	1	Sculptures of figures from the Upper Monastery, Nattu	...	129-16 123-10 112-5 122-11
46	1	Four female statues from the Upper Monastery, Nattu	...	...
47	1	Two sculptured chapels from Jamalgarhi	9-A-1	...
48	1	Sculptured chapels, &c., from Jamalgarhi	11-A-1	...
49	1	Vacuous religious scenes from Jamalgarhi	12-A-1	...
50	1	Part of a niche from the Monastery at Koi Tangi	...	47-4
51	1	A. Chapel from the Sanghao Monastery	...	A-8
52	1	B. Chapel from Jamalgarhi	14-A-1	...
53	1	C. Chapel from the Upper Monastery, Nattu	...	118-1
54	1	Sculpture of part of a niche from the Tōpe at Nullah	...	30-9
55	1	Sculpture of the side part of a niche from the Tōpe at Nullah	...	22-6
56	1	Sculpture from the Tōpe at Marjan, birth of Buddha	...	174-2

List of Plates for the "Buddhist Sculptures of Gandhara," &c.—contd.

No. of Plate.	No. of Sheet.	Description.	No. in General Cunningham's List of Photographs.	No. in Major Cole's Catalogue.
35	...	Sculptures representing the birth of Buddha, Jamalgarhi	10—A—1	...
36	...	Sculpture from the Upper Monastery at Natta: Birth of Buddha	...	120—16
37	...	Woman and Eagle; No. 1 from Upper Natta, Nos. 2, 3, and 4 from the Sanghao Monastery	...	2—2
38	...	Ganymede after Loochana	...	...
39	...	Various scenes. A. Torture of a Buddhist Monk, Lahore Museum	...	...
40	...	H. Buddha with a fiery Halo, standing on water, Sanghao Monastery	...	12—12
41	...	C. Figures from the Upper Monastery at Natta	...	100—52
42	...	D. and E. Boys and Lions from Monastery at Kot Tangi	...	104—64
43	...	Sculpture: Buddha casting a Snake from his Bow, Lahore Museum	...	...
44	...	Sculpture: Temple or Building on fire, Lahore Museum	...	...
45	...	Sculpture: Buddha, Urovilva and Naga—Tape at Chinglai	...	110—4
46	...	Sculpture: Buddha and Naga, Sanghao Monastery	...	111—12
47	...	Sculpture from the Lower Monastery, Natta, Symbol worship	...	112—9
48	...	Sculpture: Buddha and Urovilva, Sanghao Monastery	...	113—15
49	...	Sculpture: Buddha and Elephant, Kot Tangi Monastery	...	114—13
50	...	Sculpture: Death of Buddha, Lower Monastery at Natta	...	115—1
51	...	Sculpture: Boys and Vines, Upper Monastery at Natta	...	116—6
52	...	Sculpture: Death of Buddha, Upper Monastery at Natta	...	117—2
53	...	Sculpture: Coffin or relic chest, Tape at Natta	...	118—10
54	...	Sculpture: Buddha and club men, Jamalgarhi	11—A—1	...
55	...	Various sculptured scenes, Jamalgarhi	12—A—1	...
56	...	Various domestic scenes, Jamalgarhi	13—A—1	...
57	...	Various religious scenes, Jamalgarhi	14—A—1	...
58	...	Various religious scenes, Jamalgarhi	15—A—1	...
59	...	Four-horned chariot and various religious scenes, Jamalgarhi	16—A—1	...
60	...	Sculpture: Relic worship, cremation, Upper Natta Monastery	...	119—8
61	...	Sculpture: Boys and garlands, Lower Natta Monastery	...	120—2
62	...	Sculptures from Kot Tangi Monastery—Heads	...	121—12
63	...	Boys and garlands	...	122—1
64	...	Seated Buddhas	...	123—1
65	...	Band of small niches	...	124—12
66	...	Seated Buddha, Lower Monastery, Natta	...	125—1
67	...	Various sculptures: Heads of Princes, Sanghao Monastery	...	126—1
68	...	Boys and garlands, Lower Natta Monastery	...	127—1
69	...	Two Pilasters and fragment, woman and glass, Sanghao Monastery	...	128—12
70	...	Sculpture: seated Buddha with attendants, under a gallery filled with women, Lahore Museum	...	...
71	...	Base of a throne, figures of woman and man with a lamp, Lahore Museum	...	...
72	...	Steps of the Topy stairs, Jamalgarhi, XIV, II, and IX	21—A—1	...
73	...	Steps of the Topy stairs, Jamalgarhi, V, VIII, VI, and VII	22—A—1	...
74	...	Steps of the Topy stairs, Jamalgarhi, XVI, IV, and XII	23—A—1	...

Appendix U.

Great Temple to Siva and his Consort at Madura.

(An elaborate survey was made by me of this temple, but has not yet been published.)

PLATE I.—View of the Mutte Goparam (Heliogravure).

PLATE II.—View of the Mutarli Mandapam (Heliogravure).

PLATE III.—View of the Viavasanta Mandapam (Heliogravure).

PLATE IV.—Temple Jewels (Chromolithograph).

Madura is one of the most interesting places in India, the peculiarities of Dravidian art being more marked and more grotesquely elaborate here than in any other southern city. The Great Hindu Pagoda, with its picturesque gateways and pillared halls, produces a grand effect, whilst the deeply cut sculptures thrown into strong relief by brilliant sunlight are unsurpassed for variety and elaboration. This cannot fail to be the impression produced on any attentive spectator. The temple buildings are, moreover, not deserted like so many Indian shrines, but at all hours thronged with priests, worshippers, buyers and sellers, in this respect rivalling the busy religious spectacles which rapidly succeed each other at Benares. The activity of Hinduism both in its religious and artistic traditions is of the first interest at Madura, whilst in the civil architecture of the city one may observe an unrestrained use and appreciation of Muhammadan forms rendered in the peculiar manner of southern artisans.

2. A plan of Madura, dated 1688 A.D., published in *Les Monuments Anciens et Modernes de l'Hindoustan* by L. Langlès (Paris, 1821), shows the city to have been laid out with regularity; the central square containing the pagoda and palace buildings, shut in by double walls, was enclosed by a moat, again surrounded by streets, the whole covering a square area, to walk round which, the author says, took a good two hours.

3. The invasion of Southern India in 1310 A.D. by Malik Kafur caused the overthrow of the original pagoda, built probably some centuries before Christ. The existing edifices, forming the central portion of the temple, are said to date from 1520 A.D., but the surrounding and more magnificent buildings are mostly of Trimal Nayakkan's time (1623—1659 A.D.). Some of the inscriptions on the columns and walls are however older. One on the East Gopuram (Sundara Pandiya Gopuram) is dated 1322 A.D.; and in the same building is an inscription recording the gift of lands to the temple in the tenth year of the reign of "Sundara Pandiya Deva" (probably Rajendra Chola, who reigned up to 1113 A.D.).¹

The following inscriptions were noted:—

	No.
East or Sundara Pandya Gopuram	12
Thousand pillar Mandapam	1
Minakshi Nairkar Mandapam	3
Mudli Pilli Mandapam	1
East wall of Minakshi's temple	8
South cloister of Sundara Ishwara temple	1
West passage of do. do. on pavement	2
North wall of do. do.	3
East wall of do. do.	2
Carried over	33

¹ See list of Antiquities, Madras, by Mr. R. Sewell, Madras, 1892.

	Brought forward	No.
Passage floor of Sandara Ishuara temple		33
South wall of do. do.		1
Palala Gopuram do. do.		1
Jawandi Lingam Gopuram		2
Front of entrance to the Minakshi Mandapam pavement		1
West outer wall of Sandara Ishuara temple		14
North do. do. do.		13
Pavement do. do. do.		2
East do. do. do.		8
Math Gopuram		3
Gopuragam Gopuram		6
Kallana Mandapam		1
Outside kitchen near the Chitra Gopuram		1
South wall of the Pottamara Kulam		4
Trimal Nayakkan's Mandapam		15
TOTAL		106

4. The two central shrines are dedicated to Siva, called "Sundareshuvar," and "Minakshi" the fish-eyed goddess, the consort of Siva. The ceremonies connected with these gods furnish constant occasions for festivals within the walls of the temple, as well as processions outside in the city.

5. Photographs were taken of the most remarkable jewels used for the gods. The oldest is a pendant, studded with precious stones, presented by Sundara Pandiyan (which, if he was a Pandyan king, must have been before 1310 A.D.). Trimal Nayakkan gave a bead turban for the god: (See Plate No. 4.)

6. The grotesque silver gilt vehicles for the god and goddess to ride in procession represent a lion, a swan, a human-headed bird, and a Yali or griffin, but are modern goldsmiths' work. All the other ornaments appear to be modern, and there is nothing on record to show when they were given. The designs of jewels at Rameshvaram and Madura are admirable, particularly pendants of double-headed garudas or birds with outstretched wings in solid gold studded with precious stones. These resemble some beautiful Egyptian jewels of gold incrustated with enamel and stones (figured at page 833 of *Histoire de L'art dans L'antiquite*, by Perrot and Chipiez—Paris Hachette & Co., 1882), which represent birds with outspread wings holding in their talons the emblems of eternity.

7. There is no means of knowing what the plans of the original temples at Madura were like. They may have been isolated shrines or with a single enclosure like the "Alaiva,"¹ or they may have been buildings with more than one enclosure like the Egyptian temples; but as rebuilt, enlarged and added to by Trimal Nayakkan, they possess three principal enclosures, and it appears from the unfinished Rayar Gopuram that a fourth was in contemplation. All are for the service of the temple, and not as fortifications such as may be the last three enclosures at Srirangam.

8. The pagoda is very wealthy, has an endowment from Government, and receives frequent gifts of great value. Considerable sums are spent in repairs, and in painting and whitewashing the carved masonry of the Gopurams and halls.

9. The following describes those portions of the temple to which unbelievers have access, and which for the most part are under secular government and used for everyday purposes. No notice has been taken of the condition

¹ Alaiva or Shore temple at the Seven Pagodas.

of the actual sanctuaries, as this is a matter which alone concerns the temple committee.

10. The principal entrance is from the east through the Sundara Pandya Goparam, measuring 102 feet by 58 feet in plan; the building has been repaired and the exterior figures newly painted, the effect being quaint and pleasant at a distance. The steps leading down from the street are in disrepair. On the top step is an inscription which is worn in places. On the side walls of the passage are several other inscriptions. An inscription on the sill stone is worn. The wooden doorway of the Goparam is in disrepair. It is richly ornamented with carvings. The chamber on the right has been closed up by a roughly built wall with a small doorway. Rude steps have been made leading up to the left chamber, in which is the staircase for reaching the upper stories. There are two small niches on the inner side of the passage, which are used as receptacles for rubbish. The stone flooring of the passage is worn.

11. On leaving the Sundara Pandya Goparam the Viavasanta Rayar Mandapam is reached. See Plate No. III. Four of the columns on either side of the east entrance have life-size sculptured figures, one slightly mutilated. Three of these have been photographed. On the south side of the court a stone beam has cracked between two columns, and an additional stone pillar has been placed as a support. The roof shows signs of leakage on the east side between the outer and second row of columns, also on the north side. All the columns and ceilings have been whitewashed. A portion of the colonnade to the west has been built up to form mortar pits for the recent plaster repairs. Detail drawings were made of three columns and of the plinth of a fourth.

12. To the north of the Viavasanta Rayar Mandapam is the thousand-pillar Mandapam. The entrance steps are in disrepair, and the inscription on the top step is nearly defaced. The floor of the court is in a very bad state. The roof appears to be rain-proof, but a number of openings have been made by removing ceiling slabs to admit light, and the rain pours in at these places and does damage. The whole of the ceilings and columns have been whitewashed; their lower portions are very dirty. The first two rows of columns have sculptured figures of considerable spirit, and are, with the exception of a few chips, in good preservation. Detail drawings were made of ten columns and of the plinths of two others.

13. South of the Viavasanta Rayar Mandapam is the Slier Vagarar Mandapam, the flooring of which is in great disrepair and very dirty. The lower portions of the columns are whitewashed, and a shed is built against the north side.

14. A second approach to the temple enclosure from the east is through the Ashita Sakti Mandapam, a building with a great deal of grotesque carving and colored decoration, used as shops. The floor of the passage is in disrepair, the ceiling and columns are painted; but the lower portions of the latter are in a very dirty condition, being covered with grease.

15. Passing on, the Minakshi Naikar Mandapam is reached. The flooring is worn; the roof keeps out rain, but the ceiling is covered with dirt and cobwebs. The ceiling over the main passage is painted, and the supporting columns are colored yellow, but lower portions to a height of 5 feet are in a very dirty condition. The outer aisles of this court are used as elephant stables and very dirty. The brass archway for lumps in front of the Chitra Goparam is in a neglected state, and almost hidden by a dirty wooden scaffold. A slab of black stone has an inscription in good condition. There are also two other inscriptions in the passage, both nearly obliterated.

16. The Chitra Goparam has its flooring in disrepair, and walls and ceiling covered with cobwebs, dust, and lampblack.

17. The Mudli Pillai Mandapam beyond is much neglected, with whitewashed walls and columns, sculptures covered with oil and cobwebs, and the flooring in disrepair. There is an inscription on the door sill No. 17.

18. The Chitra Mandapam is a colonnade round the north, south, and east sides of the Potra Mara Culam tank, (170 feet by 114 feet). The flooring has been recently repaired, and is in good order. The outer row of columns are whitewashed, but the inner columns and ceilings are brilliantly coloured. The wall of the north side is covered with frescos representing the Siva Puranas, and two panels have been photographed. The west side of the tank is shut in by the Kili Kati Mandapam, the flooring of which has been renewed recently. The ceiling is in a dirty condition, and the old paintings discoloured. The sculptures are in good preservation, but covered with grease and dirt. The upper parts of the columns are painted. The east wall abutting Minakshi's temple to the west is covered with inscriptions, but some new stones have created gaps in the lines which otherwise seem capable of being read, although at present covered with whitewash.

19. The Mutali Mandapam, which adjoins the Kili Kati Court, seems to be of recent construction, and is in good order. The ceilings and upper parts of columns are brilliantly painted. (See Plate No. II Heliogravure). At the west end of this Mandapam is a canopy of black stone supported on columns, and near to it a doorway leading into a garden containing the Mandapam of Jawandi Ishwaram, which is in so ruinous a condition as to be only a lumber store. Passing from the Kili Kati Mandapam to the Sundarishwar Suami temple, one reaches the Nadkat Goparam. It is in fair order, but dirty. The wooden door is richly carved, and a detail drawing was made.

20. The temple of Sundarishwar Suami is on all four sides surrounded by a colonnade, the flooring of which is in disrepair and strewn with debris. Along the southern sides the columns are black with dirt and smoke, and the ceiling is dirty and haunted by bats. The back wall of the cloisters has some inscriptions, which, although here and there damaged, appear to be tolerably clear. On the west side the flooring is worn; columns and ceilings whitewashed, but the roof secure and sound.

21. The Palaka Goparam, which is an exit to the west, has been repaired and painted outside, but the ground floor is very dirty and neglected. The staircase to the upper stories is closed up.

22. The colonnade on the northern side of the temple is whitewashed; its flooring is firm, although worn. The wall surrounding the enclosure shows several cracks on the south side, and the south-west corner has somewhat sunk and cracked. There are several inscriptions on this wall, as also on some stones in the flooring. Some inscribed paving stones removed from the inner enclosure are strewn about.

23. The Mandapanaigam Mandapam is at the north-east corner of the Sundara Ishwara temple enclosure. Its flooring is in disrepair; its columns whitewashed; their capitals and the intermediate ceilings blackened by smoke. The steps leading up into the court have been recently re-constructed. This Mandapam is used as a lumber store.

24. The Sundarishwar or Kambhari Mandapam is an elaborate structure, some of the pillars of which have been detailed. The flooring has been renewed lately, also a number of the columns. The ceiling has been repaired, and the colonnade at the south-east corner has been closed to form a store-room for the

various emblematic vehicles used in ceremonies. Many of these vehicles are of silver, and the best have been photographed.

25. The Goparanaigam Goparam is the chief entrance to the Kambtari Mandapam. The flooring has lately been renewed on the inner side, but the outer portion is old and worn. The wooden doorway has been roughly repaired. The exterior of the Goparam has been repaired and painted, but the interior is black with smoke and dirt. The interior staircase is ruined. There are a few inscriptions in the passage.

26. The southern tower, called the Jawandi-Lingam Chatti Goparam, has been repaired and re-painted. The outer entrance opening has been narrowed and provided with a small door. The flooring is worn; the side wall and ceiling whitewashed; the stone pilasters painted yellow. The recess on the right is closed up for storing grain. That on the left contains the staircase to the top. There are two inscriptions in the passage.

27. An inner street passes round the two great temple enclosures on the south, west, and north. Opposite the southern tower and on the other side of the south street is a small porch and door now blocked up. Turning to the west the Tahsildar's office is passed. It has been formed by building walls between the columns, and the rooms are kept in a very dirty condition. Further west and at the corner is the shrine of Ganpati, the Mandapam of which is in a dirty and neglected condition, the floor being strewn with rubbish.

28. The colonnade along the outer wall of the west street is used for cattle. The floors are broken up; the roof leaky and dangerous and sunken in several places.

29. Both the Kadaka and Palaka Goparams are closed up and no longer used as entrances to the two sanctuaries. They have been repaired and re-painted outside.

30. The outer entrance of the western or Prakarama Pandya Goparam has been narrowed for a small doorway. The passage is in a very dirty state, being blackened by smoke and dust. The floor of the passage is in disrepair. The staircases leading to the upper stories have been repaired and their walls plastered. The exterior of the tower is in a ruined condition, but repairs are contemplated, and a scaffold for the purpose has been erected. The general construction of the Goparam has been demonstrated by careful drawings. The colonnade between the Goparam and the north-west corner is in fair repair and used as dwellings. The colonnade between the north-west corner of the outer enclosure and the Mutte Goparam is in use as a school, and is in fair condition.

31. The northern tower or Mutte Goparam (see Plate No. 1) appears to be unfinished. It is in disrepair; its staircases and upper stories are dirty and ruinous.

32. Opposite this Goparam is the Chinna Mutte Goparam, which has been recently repaired and re-painted.

33. The sixteen-pillar Mandapam, which is between the thousand-pillar Mandapam and the enclosure of the two principal temples, is in fair condition, but the columns and ceilings are whitewashed.

34. The Subiar Mandapam abuts the east wall of the Sundarishuar enclosure. It is in fair condition, but the walls are whitewashed.

35. Next to this, to the south, is the Kaliana Mandapam, or marriage hall. The floor is in disrepair; the ceiling and columns whitewashed. It was originally an open pavilion, but now is open on the east only. On the two side walls are some curious drawings. There is an inscription on black stone.

36. The colonnade along the south outer wall and to the east of the southern tower is in a very dirty and neglected state. The roof is dangerous.

37. Trimal Nayakkans Mandapam, measuring 340 feet by 127 feet, is on the east of the great temple enclosure and across the street. It is also called the Pudu Mandapam. Two of the columns have been illustrated in detail. The flooring is firm but worn. The columns and ceiling are whitewashed. The lower portions of the columns are very dirty, and most of the sculptured figures painted. The roof is sound, but the parapet walls over the east and west ends are in ruins. The side walls to the north and south are bare, no parapets having been erected. A portion of the stone coving at the north-west corner is damaged. The sculptured horses on the west side have been slightly mutilated. The tatties and screens put up to enclose the hall are a disgrace to the place. The pavement and colonnade north and south of the building are extremely neglected and dirty, and used as urinals by the natives. There are several stones bearing inscriptions, but they do not appear to be in their original positions.

38. The Rayar Goparam, measuring 172 feet by 112 feet, is finished to the first story only. The passage is dirty and covered by rubbish of all sorts.

39. Very little attention seems to be paid to the sanitary condition of the temple. Every recess and corner is taken advantage of to be used as a latrine. The only places regularly swept are where processions pass, or where worship is conducted.

40. There are a number of stones bearing inscriptions, the positions of which are indicated by numbers on the plan which I had made of the temple. Many of these seem to be detached from their original positions, and a number of inscribed stones have been brought from the interior enclosures to be used for repairs. This will naturally destroy a good deal of historical evidence which may be of importance.

Appendix V.

Great Temple to Vishnu on the Srirangam Island near Trichinopoly.

1. The earliest known examples of Dravidian architecture are at Mahavallipur (Seven Pagodas), which, with one exception (the Alaiva or shore temple), date from A.D. 650 to 700, and are cut out of the solid rock, being isolated structures with no enclosures. Mr. Fergusson calls these Rathas "the petrifications of the last forms of Buddhist architecture and of the first forms of that of the Dravidians." The oblong Rathas became Gopurams or gates, the square Rathas Vimanahs or sanctuaries, and both continued to be copied, together with their details, to a late period. The rock-cut caves, with their monolithic pillars, appear to have been the precursors of the many pillared halls or Mandapas of Southern India, and are curiously like the rock-cut tombs and temples of Egypt and Nubia.

2. The Alaiva temple at Mahavallipur illustrates the growth of the style and is a structural temple, probably dating A.D. 800 to 900, the sanctuary being surrounded by an outer wall, whilst an enclosure buried in the sand has recently been discovered to the west of the building.

3. Mr. Fergusson has touched on the similarities between the Egyptian and Dravidian Temples.¹ He says—

—It may be mentioned that the Gopurams, both in form and purpose, resemble the pylons of the Egyptian temples. The courts with pillars and cloisters are common to both and very similar in arrangement and extent. The great Mandapas and halls of 1,000 columns reproduce the Hypostyle halls, both in purpose and effect, with almost minute accuracy. The absence of any central tower or Vimanah over the sanctuary in Egypt is only conspicuously violated in one instance in India (Tanjore). Their mode of aggregation, and the amount of labour bestowed upon them for labour's sake, is only too characteristic of both styles."

4. Whilst questioning the accident of this resemblance, Mr. Fergusson considers the interval of time so great as to negative the idea that the features of Dravidian temples were imported from Egypt; but, looking to the intercourse between the two countries certainly existing in remote ages, he allows that seed may have been sown which fructified long afterwards.

5. Beyond mere name, is there any origin common to the Egyptian king and conqueror Rhamses and to the Indian god and hero Rama? We know that the temple of the former—the Ramesseion at Thebes—was laid out on principles followed at Rameshvaram, the temple of Rama in the extreme south of Madras. Again, the resemblance between the eagle-headed Garuda or vehicle and companion of Vishnu and the bird-headed figures of Egypt, Horus, and Thot, also between the grotesque winged lions of Nimroud in Assyria, and the monster Yalis or griffins of the Madras porches, seems to indicate the origin of some of the features of the Vishnu faith.

6. The designs of the temple jewels at Rameshvaram and Madura suggest antique origin, particularly pendants of single and double-headed Garudas or birds, with outstretched wings, in solid gold studded with precious stones. These resemble some beautiful Egyptian jewels of gold incrustated with enamel and stones, figured at page 833 of *Histoire de L'art dans L'antiquité*, by Perrot and Chipiez (Paris Hachette & Co., 1882), which represent birds with outspread wings holding in their talons the emblems of eternity.

¹ See page 279, *History of Indian and Eastern Architecture*.

PLATE No. 1.—General Plan of the Srirangam Temple—(Double Plate).

7. The great temple on the Srirangam Island, formed by the Kaveri and Koleru rivers, is over 4 miles north of the Trichinopoly civil station. A plan of A.D. 1688, at page 100 of Vol. I, *Les Monuments Anciens et Modernes de l' Hindoustan*, by Monsieur L. Langlès (Paris, 1821), shows a pagoda on the present site, but nothing to indicate the disposition of the buildings, or whether the present enclosure walls then existed. Mr. Fergusson states that all the main parts of the temple belong to the first half of the 18th century, and this is probably correct in respect of the superstructures of the pyramid gates which are of brick, plastered in a very florid style. But some of the stone basements of these huge structures have a more ancient look. The rampant horses in Plates Nos. 3 and 9 bear a resemblance to those in the Vellore temple (A.D. 1350), and to those at the entrance to Trimal Nayakkan's choultry at Madura (A.D. 1645). A comparison of some of the details in the third and fourth enclosures (see Plate No. 6, Column H, and Plate No. 10, Column F) with those in the rock-cut temples and caves at Mahavallipur (650—700 A.D.) show how ancient forms were reproduced in later and more elaborate buildings.

8. Viswanatha Nayakkan, one of the kings of Madura, took possession of Trichinopoly about A.D. 1559, and built part of the Srirangam temple, but Mr. Lewis Moore tells us in his *Trichinopoly Manual* that he certainly did not build the oldest portions. The Tamil manuscripts state that Trimal Nayakkan (A.D. 1823—1639) constructed 96 Ravar Gopurams, of which some were in Srirangam. Vijaya Ranga Choka (A.D. 1703—1731), the last of the Nayakkans, appears to have largely endowed the temple, but shortly after both the pagodas of Srirangam and Jambhuishwar were occupied by the troops of Chanda Sahib and the French until the English and their Mahratta allies under Lawrence, Clive, and Monakji, obliged them to capitulate. Both temples continued to be used as encampments during the wars between the English and French up to the end of the 18th century, when Trichinopoly was transferred to the British Government.

9. The late Dr. Burnell held the opinion that all the great Madras temples to Vishnu were erected in the 12th and 13th centuries, and that Krishnaraya (1509—1530 A.D.) built the great Gopurams at Conjeeveram, Chhillambaram, and Srirangam, to form fortifications to protect the shrines from foreign invaders. The masonry of the Srirangam buildings requires to be cleaned of plaster and whitewash before a perfect search can be made for inscriptions to elucidate history.

The following inscriptions were taken note of by my surveyors:—

1st court or sanctuary	5	inscriptions on walls			5
2nd do.	7	do. do.			2
3rd do.	16	do. do.			16
4th do.	10	do. on pavements			10
5th do.	56	inscriptions on pavements			56
6th do.	3	do. do.			3
7th do.	1	do. on north Gopuram			1
8th do.	4	do. on pavements			4
9th do.	2	do. on the north Gopuram			2
10th do.	4	do. on south Gopuram			4
Total					108

10. Due probably to its gradual development around the original central shrine, there is a great want of compactness in the general design. It is now a

walled town with a number of spires and fane dotted irregularly about; and, as Mr. Fergusson remarks, the gateways lose half their dignity from their positions, the bathos of their decreasing in size and elaboration, as they approach the sanctuary, being a mistake which nothing can redeem. On the other hand, there is a great picturesqueness in the whole viewed from a height or distance, and much to admire in the designs and details of the individual structures.

11. I was told that the income amounts to Rs. 60,000 a year, but the annual festivals lasting 20 days, and to which great crowds assemble from all parts, must yield a good deal in gifts and offerings. The three outer enclosures of the temple occupied by houses have since 1871 come under the Municipal Act of that year, and the Commissioners, with receipts amounting annually to over Rs. 20,000, have the means of keeping some of the most important structures in proper condition. I am indebted to Mr. Sewell, Collector of Trichinopoly, for a detailed list of all the more important temple jewels used to adorn the god at festivals. Photographs were procured by me of the best examples. According to the temple records, Vijaya Ranga Choka Nayakkan (A.D. 1705—1731) presented some of the earliest specimens, comprising valuable vessels of solid gold and handsome suits for the god, of gold armour studded with precious stones. His Royal Highness the Prince of Wales in 1876 gave a golden salver.

12. The outer or *eighth court* covers a very extensive area, measuring 2,520 feet by 2,865 feet. The four walls are in fair condition. The northern Gopuram at A on the general plan (Plate No. 1) is built up to a height of 4 feet only, and dwelling-houses are erected over it. The eastern tower at B is built to a height of 12 feet. The entrance door is in disrepair. The southern gate at C is complete to the first story and known as the Rayar Gopuram. The structure is overgrown with vegetation which should be removed, and the door which is dilapidated should be repaired. The western tower at D has its plinth built to a height of only 4 feet.

13. The *seventh court* is enclosed on all four sides by walls in disrepair, portions of the parapet and upper masonry having fallen. The exterior of the northern Gopuram at E is in disrepair, also the floor of the ground story. The southern tower or Talayari Gopuram at G is overgrown with vegetation, and its exterior in bad condition, the plaster having fallen in several places. The flooring of the passage is in bad order, and the ceiling with its paintings disfigured with dirt. The western Gopuram at H has its exterior in disrepair, but the interior is in fair order: the doors require looking to.

14. The walls of the *sixth enclosure* are in a very ruinous condition, the upper portions crumbling away and overgrown with creepers. The northern tower at J is overgrown and in a state of ruin. The interior is in fair order, but the ceiling of the ground floor has paintings soiled by dirt. The eastern tower at K is known as the Katti Gopuram. The exterior is in fair order, but portions of the plaster in disrepair. The interior of the Gopuram is in good order. The southern or Nanmohan Gopuram at L is in a ruined condition, and the exterior full of weeds. The interior is in fair order, but the ceiling frescos of the ground floor dirty. The western or Sakkilian Kottavasal Gopuram at M is in disrepair, and portions of the brick-work fallen.

15. The walls enclosing the *fifth court* are in fair condition. The northern or Nachiar Sanadi Gopuram at N is in fair order, but the door out of repair. The eastern or Vaile Gopuram at O is in very good condition, but a portion of the stone coving has been broken off outside. The exterior of the southern or Kural Alwar Gopuram at P is in great disrepair, but the interior is in fair

order. The painted ceilings of the ground floor are very dirty. There is no western tower to the fifth court.

16. The walls round the *fourth court* are in good order. The northern tower at Q is in great disrepair, the plaster having fallen as well as portions of the masonry. The southern tower at R is in disrepair, and young trees rooted on the top. There are but two Gopurams to the fourth court, beyond which none but Hindus may penetrate.

17. The walls and buildings coloured red on the plan, Plate No. 1, enclose the temple proper. Between the fifth, sixth, seventh, and eighth enclosures, are streets of houses, coloured grey on the plan.

18. The principal halls or Mandapams are between the fourth and fifth enclosures. The thousand-pillar Mandapam at the north-east corner, the Sashgiri Rao Mandapam on the east side, and the Rangvilasam Gopuram to the south.

**PLATE No. 2.—Plan and Section of the Thousand-pillar Mandapam—
(Single Plate).**

**PLATE No. 4.—Pillar in the Thousand-pillar Mandapam, marked L on
the Plans—(Single Plate).**

**PLATE No. 8.—Pillars in the Thousand-pillar Mandapam, marked K
and M on the Plan—(Single Plate).**

19. The so-called thousand-pillar Mandapam is in fair order, but portions of the floor near the south entrance and at the north-east corner are broken up. The ceiling and columns have been whitewashed, and some of the latter coloured in red and yellow stripes. The carved stone should be laid bare. The actual number of pillars in the hall is 952. The building runs almost due north and south and measures 508 feet by 155 feet. It has a series of three terraces rising one above the other to the north. Details of three of the columns are shown in Plate No. 4, Column L, and Plate No. 8, Columns K and M. Their simple outline points to the probable early date of the hall, which from its position appears to be an integral part of the fifth enclosure.

**PLATE No. 3.—Pillar in the Sashgiri Mandapam, marked B on Plan,
Plate No. 1—(Single Plate).**

**PLATE No. 4.—Pillar in the Sashgiri Mandapam, marked A on Plan,
Plate No. 1—(Single Plate).**

**PLATE No. 9.—Carved Pillars in the Sashgiri Mandapam, from a
Photograph reproduced in Heliogravure—(Single Plate).**

20. The Sashgiri Mandapam is one of the most elaborately carved colonnades in the temple, and, judging from the way in which it is placed, seems to be later than the fifth court. Knowing that Trimal Nayakkan had a share in the additions to the Srirangam temple, the probability of his having built this Mandapam is increased by the resemblance of the rampant horses in Plates Nos. 3 and 9 to those in his choultry at Madura. The carvings are much spoilt by streaks of red and yellow paint. The floor of the building is in disrepair, but the roof and ceiling in fair order. One of the columns has been damaged, and the figures of a tiger and a man lie broken at the base.

PLATE No. 5.—Pillar in the Rangvilasam Mandapam, marked C on Plan, Plate No. 1—(Single Plate).

PLATE No. 6.—Pillar in the Rangvilasam Mandapam, marked E on Plan, Plate 1—(Single Plate).

21. This hall, used as a council room for the temple, also appears to have been added after the fifth court was built. It is in good condition, but the parapet wall is in disrepair. Details of two of the columns, marked C and E on the plan, Plate No. 1, and figured in Plates Nos. 5 and 6, show considerable refinement and delicacy in design suggestive alike to those who work in stone or metal.

PLATE No. 6.—Pillar in a Mandapam in the northern portion of the fourth enclosure, marked H on Plan, Plate 1—(Single Plate).

PLATE No. 10.—Details of a Pillar marked F, and a Door marked J, in the fourth enclosure. See Plan, Plate 1—(Single Plate).

22. Visitors are not allowed in the fourth enclosure, but my Hindu surveyors made a plan of it with the courts beyond, and obtained the details which form the subjects of the illustrations. The column marked H in Plate No. 6 is from a twelve-pillared porch in the northern part, and very similar in design and proportion to the pillars in the Raths at Mahavallipur (650—700 A. D.). Its appearance suggests an early date. The column marked F in Plate No. 10 is from a four-pillared porch to the south of the third enclosure. The door J in Plate No. 10 is from the Garuda temple between the two south Gopurams of the third and fourth enclosures. Most of the better planned and more celebrated Madras temples have doors of this description handsomely carved in wood.

PLATE No. 5.—Pillar from a Mandapam in the third enclosure, marked G on Plan, Plate 1—(Single Plate).

PLATE No. 7.—Four-pillar Porch in the third enclosure. See D on Plan, Plate 1—(Single Plate).

23. An elegant little porch at the north-west corner of the third court is shown in Plate No. 7. The superstructure above the cornice or Chujjais of wood and probably a repair, the lower parts being of stone. The simplicity of the ornaments is suggestive of the earlier period of Dravidian art. The Column G from a hall in the south-east corner of the third enclosure resembles some of the columns in the Vellore Fort (A. D. 1350).

24. The principal shrine, in the centre of the building, is dedicated to Vishnu, called Ranganath Swami. It has a modern gilt dome. The goddess has a temple in the north-west corner of the fifth enclosure, called "Rangnalki." Besides these, there are numerous small shrines in the various enclosures dedicated to minor deities and one to Ganesha.

Appendix W.

*Temple to Siva called Jambhuishwar on the Srirangam Island,
Trichinopoly.*

1. In a note on the Srirangam Temple, I have pointed out how we have to look to the Rathas at Mahavallipur for the earliest known Indian examples of Dravidian architecture (650—700 A.D.). Mr. Fergusson aptly calls them the petrifications of the last forms of Buddhist architecture and of the first forms of the Dravidians. The oblong Rathas supplied models for the great gates, the square Rathas models for the Vimanas or sanctuaries of the temples. The rock-cut caves, with their monolithic pillars, appear to have been the precursors of the many-pillared halls or Mandapas and resemble the rock-cut tombs and temples of Egypt and Nubia.

2. The temples of Southern India, with their lofty gates and numerous enclosing walls, have, whether by accident or through the connection between the two countries in remote ages, a resemblance to the temples of Egypt. The Gopurams resemble the Pylons of the Egyptian temples; the courts with pillars and cloisters are common to both, and very similar in arrangement and extent. The great thousand-pillar Mandapams reproduce the Hypostyle halls, and the enclosure of the sanctuary within numerous barriers was in both the very essence of the plan.

3. The temple to Siva on the Srirangam Island near Trichinopoly, known as "Jambhuishwar," is smaller than the Great Temple to Vishnu at the same place; but with the greater interest of earlier date, it surpasses it also in beauty and architectural dignity. There are many inscriptions on its walls, one dating A.D. 1181-82; but if, as Dr. Burnell says, all the great temples to Siva in Southern India were built in the 11th century A.D., we may expect something earlier to be recorded among the inscriptions not yet read or yet to be discovered.

The following were noted by my surveyors:—

Sanctuary	—3 on the floor, 2 on walls, total	5
2nd Court	—2 on the floor, 7 on walls, on pillars, total	9
3rd "	—16 on the floor, 22 on walls, total	38
4th "	—3 on the floor of temple to Lakshmi	3
5th "	—None	—
6th "	—1 on the Gopuram to the west	1
TOTAL		47

4. Mr. Lewis Moore, in his Manual of the Trichinopoly District, says the Jambhuishwar temple is not a rich one. It had in A.D. 1750 an endowment of 64 villages, but in 1820 owned only 15. In 1851 an annual money allowance of Rs. 9,450 was given to the pagoda in lieu of the lands, and this sum, sufficient to keep the buildings in good order, is paid every year to the trustees.

PLATE No. 1.—General Plan of the Jambhuishwar Temple.—(Double Plate).

5. There are six courts to the temple: none but Hindus are admitted to the 3rd, 4th, 5th, and 6th. The walls of the first court are in disrepair and overgrown with vegetation. The principal entrance is on the west side by the Gopuram D, the exterior of which is in disrepair but the interior in good order.

excepting the floor. There is here a stone with an inscription. The northern gate at A is built up to the first story only. The eastern tower at B is finished to a height of only 10 feet; both are in good condition. The southern Gopuram at C is built up to the first floor; the interior is in good order, but the floor covered with earth; the carved wooden doors are in disrepair. The first enclosure measures 2,420 feet by 1,490 feet. The so-called thousand-pillar Mandapam with its tank is in this court, and has to be traversed on entering from the west.

6. The *second court* measures 1,370 feet by 520 feet. It has only two entrances. The gate at K on the west is overgrown with vegetation, and the exterior is in disrepair. The interior is in fair order, but the door dilapidated. The Gopuram to the east at E is in fair condition, but overgrown with vegetation.

7. The remaining Gopurams at F, G, H, and J, are in a ruinous state: access is, however, denied to any but Hindus. The portions of the building coloured brown are used as dwellings or for secular purposes: the temples and accessories are coloured red, and their gardens green.

PLATE No. 2.—Plan and Section of the Thousand-Pillar Mandapam.

PLATE No. 3.—Column marked G on the Plan.

PLATE No. 4.—Columns marked E and F on the Plan.

8. The thousand-pillar Mandapam with its tank, called the Surya Tiratham, measures 525 feet long by 130 feet wide. The tank is said to be fed by a perpetual spring, but I am unable to verify this. The total number of columns in the hall is 707, and round the tank 132, making 839 in all. The Mandapam runs nearly due north and south, and has four sets of floors rising one above the other to the north. The columns at F and G are elaborate in design, the scrolls of foliation carved in panels being specially effective. Column E is plainer and more primitive in outline. The floors of the building are in bad order; the ceilings, however, in fair condition; but both ceilings and sculptured columns are whitewashed.

PLATE No. 3.—Columns B and C in the Indar Tiratham Mandapam, within the fourth court of the Temple.

9. Once a year the god is brought from the Great Vishnu Pagoda at Srirangam and placed in the porch of the Indar Tiratham. The visit is accompanied with great ceremony, and the priests assemble round the small tank.

The two columns B and C in the building were detailed by my Hindu draftsmen, who alone were permitted to pass beyond the fourth enclosure. Column B resembles those in the Subramanya temple at Chittambaram. Column C is an edition of those at the Seven Pagodas, but the building from its position appears to have been added after the fourth enclosure walls were erected.

PLATE No. 4.—Column A in the Maisur Raja's Mandapam in the fourth court of the Temple.

PLATE No. 5.—Column D in the Unjal Mandapam in the fourth court of the Temple. Door H in the gate of the third enclosure.

10. The Maisur Raja's pavilion is a square building supported by 24 columns. The Detail A shows the elaborate design and sculpture of one with its scrolls and quaint figure devices. The Unjal Mandapam is a small pavilion at the

south-west corner of the fourth court. The Detail D of one of its columns looks more modern in style than the rest of the temple architecture. The Gate H leading into the third court has a handsome wooden door studded with iron knobs, which is detailed in Plate No. 5. (XYLIA-DOLA-BRIFORMIS—The Iron Tree.)

11. The name "Jambunath" is derived from Jambu, the name of a tree, and Isvara, a name of the god Siva; but the temple is also known as Tiravanaika, or sacred grove of the elephant, by which name the position of the building is indicated on a map of Trichinopoly, dating A.D. 1688, reproduced in M. Langlès's *Monuments Anciens et Modernes de L'Hindoustan* (Paris, 1821).

12. The central sanctuary, called the Jambunath Swami, contains a stone lingam; the building is of small size, irregular in outline in plan and with a flat roof. The female goddess Lakshmi has a temple to herself in the north part of the fifth enclosure; besides these there are numerous pillared halls and choultries, a tank and pavilion for the special use of the god and goddess, and a tank and Mandapam dedicated to Brahma.

Appendix X.

Great Temple of Ramnath Swami at Rameshwaram.

1. The pagoda of Rameshwaram (from two Sanscrit words Rama and Ishwar) is one of five great places of Hindu pilgrimage in India. Rama, the seventh incarnation of Vishnu, is said to have worshipped Siya on the site of the temple, and erected the lingam now in its sanctuary. Hence followers, both of Vishnu and Siva, assemble here in great numbers. A light railway would possibly pay to carry pilgrims from the Madura to the coast, but at present the journey is over 68 miles of bad road to Ramnad, the sand being in some places very heavy. Mandapam on the coast is 24 miles further, and from thence a boat conveys one across the channel to Paumben in the Rameshwaram Island. The town of that name is about 7 miles beyond, and at its east end stands the temple buildings, the outer walls of which measure 866 feet along the north, 864 along the south, 654 along the east, and 664 along the west face. I had a very careful survey made of the place, and photographs taken of the principal features.

2. The entrance from the Paumben side is by the western Goparam, which is all of stone, measuring in plan 62 feet long by 40 feet wide, and crowned by five stories, the total height being about 100 feet. The building is of comparatively simple outline, excepting the upper story which is covered by some florid plaster figures and ornaments. It is in disrepair; the passage dirty and neglected: there are two inscriptions in it. Passing through the door one enters a covered avenue 440 feet long by 60 feet broad, with three rows of columns on either side. The detail was drawn of one with a rampant Yali or griffin. The centre of this avenue is crossed by the third or Muna Prakaram, a corridor encircling the temple buildings on all four sides, and constituting its chief attraction from an architectural point of view. The corridors on the longer sides of the rectangle measure about 667 feet from end to end. All four flanked by elaborately sculptured pillars in rows from three to five deep produce an effect by the display of labour and the length of the vistas, which is unequalled elsewhere in India. Unfortunately the ceiling and columns are covered with plaster and paint, but the general effect is most impressive.

3. Passing along this great corridor to the right or south, one sees to the east a tank surrounded by steps measuring 117 feet square at the top, and to the west a Siva Lingam temple measuring in plan 59 feet by 35 feet, which Mr. Fergusson thinks may date from the 11th or 12th century A.D. Continuing along the south, there are some handsome columns at the corner, detailed drawings of which have been made; the former 17 feet and the latter 23 feet in height. Half way down the length of the corridor one crosses the approach from the southern Goparam. The latter is an unfinished masonry gate built to a height of 20 feet, and measuring 110 feet by 62 feet in plan. If completed, this would have been the most imposing building in the temple. Now it is overgrown with weeds and in disrepair, the outer opening being narrowed to a small wicket. The corridor to the east of the temple passes between the Muttee Goparam and the Mangala Goparam on the west or left, and the Vasanta Mandapam and Kalliana Mandapam on the east or right. The Vasanta Mandapam, measuring inside 77 feet by 59 feet, has 34 isolated columns, one of which is 10 feet high, and, with the figures of a Ramnad Raja and his wives, was drawn in detail. The whole building is neglected: columns and ceilings plastered, and the ceilings covered with paint. There is an inscription on a black stone slab

The adjoining Kaliaana Mandapam measures inside 75 feet by 38 feet but is dirty and dilapidated; the columns and ceilings plastered and colorwashed. Opposite the Kaliaana Mandapam is the Mangala Goparam, measuring 35 feet by 23 feet in plan: the superstructure of which is complete. A column in the colonnade in front of the gate was drawn in detail. The Vasanta Goparam forms the principal approach to the temple and is connected by a corridor with the Muth Goparam, a gate measuring 91 feet by 51 feet in plan. Its superstructure is incomplete, but is built of stone without florid figure sculpture to confuse the structural outline, and, as Mr. Fergusson remarks, it more nearly reproduces the effect of an Egyptian propylon than any other example of its class in India. The corridor or Prakaram to the north has over 450 pillars, and a drawing has been made of one with a figure of a man carrying a woman on his back (perhaps Sita being carried off by Ravan). The northern Goparam measures 108 feet by 62 feet, and is built up to a height of only 12 feet. The structure is in disrepair and overgrown with vegetation: the outer entrance is narrowed to a small wicket. A detail was drawn of a column in the western corridor, with a statue on it of one of the Rajas of Ramnad. The outer wall surrounding the temple buildings is in considerable disrepair.

4. The sanctuaries of the god and goddess are separate shrines, each surrounded by a Prakaram. The two are connected by a corridor and again surrounded by a second Prakaram, but to this part of the temple only Hindus are admitted. My Hindu draftsmen who were allowed access made a plan and detailed three very handsome wooden doors; they also made a drawing of the monster stone bull or Nandi with its very richly carved trappings and ornaments, which stands under a pillared canopy in front of the Ramnath shrine. It measures 22 feet in length by 17 feet in height, and is nearly half as large again as the great Nandi in the temple at Tanjore.

5. Mr. Fergusson describes the Rameshwaram temple as belonging to the seventeenth century, except the small Vimana in the west corridor, already described, which he thinks may belong to the eleventh or twelfth century. From the inscriptions furnished to Mr. Sewell,¹ it appears that the Mahaman-dapam, immediately in front of the Ramnath temple, was built in 1598 A.D., and that the Kotertirtham on the north wall of the temple was built in 1608 A.D. My surveyors noted 27 different inscriptions, the positions of which are indicated by numbers on my survey.

6. I had photographs taken of the jewels used for the god and goddess, and from information furnished by the district authorities, from the temple records, have ascertained the dates when some were presented, *i.e.*,—

- i.—A conical crown for the god of solid gold, studded with pearls and precious stones, presented 1414 A.D.
- ii.—Crowns for the god and goddess of solid gold, embedded with precious stones, presented by Viawanatha Nayakkan about 1557 A.D.
- iii.—Pendants of single and double-headed birds or Garudas of gold, embedded with jewels, presented 300 years ago: these are most curious and resemble Egyptian enamelled amulets of the time of Rhameses II.
- iv.—Armour for the god of solid gold and jewels; presented about 250 years ago.
- v.—A stool of gold, presented about 1665 A.D.

¹ See list of Antiquities, Madras, (1882).

Appendix Y.

Having been called on by the Government of India to furnish a distribution list for the first issue of the Illustrations described in the appendices to this report (*vide* letter No. 15 from the Home Department, Archaeology, dated 28th January 1884), I first made enquiry as to those who would pay for complete sets. The 17 monographs, with 105 plates, have cost about Rs. 200 each entire set, and—

The following have expressed a desire to purchase:—

The Science and Art Department, London	6 sets
The Government, North-Western Provinces and Oudh	2 "
His Highness the Maharaja of Oodeypore	1 "
His Highness the Maharaja of Jeypore	2 "
His Highness the Maharaja of Jodhpore	2 "
His Highness the Maharaja of Udaipur	1 "
His Highness the Maharaja of Kotah	2 "
His Highness the Maharaja of Tonk	1 "
His Highness the Maharaja of Bhilawar	1 "
His Highness the Maharaja of Dhar	1 "
His Highness the Begum of Bhopal	1 "
The Raja of Rajgarh	1 "
The Raja of Narainpur	1 "

(Answers have not yet been received from all the Central India Chiefs.)

The following institutions should possess a set for reference:—

School of Art, Madras.
 Central Museum, Madras.
 School of Art, Bombay.
 Bombay Asiatic Society.
 Asiatic Society of Bengal.
 School of Art, Calcutta.
 Imperial Museum, Calcutta.
 Allahabad Library.
 School of Art, Lahore.
 Intelligence Department, Quartermaster General's Office, Simla.
 The Delhi Museum.
 Industrial School, Hoshiarpur.
 Kasur Industrial School (near Lahore).
 Umritsar Municipality.
 Multan ditto.
 Gujarat ditto.
 Hinthong Museum, Poona.
 Bombay Municipality.
 Surat ditto.
 Ahmedabad ditto.
 Broach ditto.
 Moradabad ditto.
 Bulandshahr ditto.
 Meerut ditto.
 Benares ditto.
 Aligarh ditto.
 Agra ditto.
 Bareilly ditto.
 Ajmer ditto.
 Lahore ditto.
 Trichinopoly ditto.
 Madras ditto.
 Nagpur ditto.

The following would probably be glad to purchase sets :—

The Chiefs of Kashmir, the Panjab, Hyderabad, Mysore, &c.
The Royal Asiatic Society of Great Britain and Ireland.
The British Museum.

And I suggest that the following be presented with copies through the Secretaries of State for India and Foreign Affairs, with a view to their subscribing to publications of the kind on Indian Art and Architecture :—

FRANCE	Musée Communal, Amiens.
"	Archæological Museum, Arles.
"	Town Museum, Boulogne-Sur-Mer.
"	Museum of Antiquities, Bordeaux.
"	" of Caen.
"	" of Art Industry, Lyons.
"	École des Beaux Arts, Quai Maitiquais, Paris.
GERMANY	Museum of Antiquities, Arnsberg.
"	Old and New Royal Museum, Berlin.
"	Art Museum of the University, Bonn.
"	Hall of Arts, Carlsruhe.
"	Wallraf-Richartz Museum, Cologne.
"	Grand Ducal Museum, Darmstadt.
"	Royal Collection of Art and Science, Dresden.
"	Städcl Museum, Frankfurt-on-the-Maine.
"	Collection at the Castle Friedenstein, Gotha.
"	Bavarian National Museum, Munich.
"	Museum of Fine Arts, Stuttgart.
AUSTRIA	Imperial Museum of Art and Industry.
BELGIUM	Musée Royal, Brussels.
NORWAY	Museum of the University of Norway, Christiania.
SWEDEN	National Museum, Stockholm.
ITALY	Museum of Antiquities, Turin.
"	Vatican Museum, Rome.
"	Musée d'Art Industrielle, Milan.
"	Palazzo del Podesta, Florence.
HOLLAND	Kunst Industrie Museum, Amsterdam.
"	Royal Museum of Carousing, the Hague.
DENMARK	Thorvaldsen's Museum, Copenhagen.
RUSSIA	Société Impériale d'Encouragement aux Beaux Arts de St. Pétersbourg.
"	Public Museum, Moscow.
"	Museum of the Archæological Commission of the Imperial Hermitage, St. Petersburg.
SWITZERLAND	Archæological Museum, Geneva.

This would dispose of 85 copies, leaving few for the usual official distribution or for sale to the public.

A fresh edition of 100 copies will cost about 5,500 francs, or 2,250 rupens, or say Rs 30 for each set of 105 plates, with letterpress and covers.

Appendix Z.

List of Illustrations together with their Cost.

Number of Plate.	Total.	Name of Place or Building.		Price cost of producing 100 copies (Rs. Indian).	Cost of printing 1000 copies per 100 (Rs. Indian).
<i>Great Top at Saucchi, Central India</i>					
1	11	Filling-in the Breach, 1881.	Heliogravure	200	25
2		General view from the north	"	"	"
3		View from the north	"	"	"
4		View from the south	"	"	"
5		View from the south with Vihara	"	"	"
6		Southern Gateway (re-built)	"	"	"
7		Back of southern gateway	"	"	"
8		West gateway (re-built)	"	"	"
9		Back of west gateway	"	"	"
10		Small gateway	"	"	"
11		Back of small gateway	"	"	"
<i>Gwalior, Central India.</i>					
1	6	Jain sculptures	Heliogravure	200	25
2		Palace front	"	"	"
3		Interior of Large Sai Bahu temple	"	"	"
4		Jama Masjid	"	"	"
5		Modern mausoleum	"	"	"
6	Ship front	"	"	"	"
<i>Chittorgark, in Mewar-Rajputana.</i>					
1	4	Jain tower from the south	Heliogravure	200	25
2		Khambo Rana tower	"	"	"
3		Khambo Rana tower—lower part	"	"	"
4		Ahar-ki-darwaza	"	"	"
<i>Udaipur, in Mewar-Rajputana.</i>					
1	5	Jainaras in the Palace	Heliogravure	200	25
2		Coloured glass, mosaic	"	"	"
3		Door of the Bari Mahal	"	"	"
4		"	"	"	"
5		"	"	"	"
<i>Graco-Buddhist Sculptures from Gandhara.</i>					
1	3	Sculpture from Mahomed Nari	Heliogravure	200	25
2		Group of sculptures from Sanghao	"	"	"
3		Woman and eagle from Sanghao	"	"	"
26		Carried over.			

Number of Plates	Total	Name of Place or Building	Price (cost of producing see column (in francs))	Cost of printing addi- tional copies per 100 (in francs)
	20	Brought forward.		
		<i>Greco-Buddhist Sculptures from Gandhara—continued.</i>		
4		Group from Sanghao	Heliogravure	200
5		" " and Lower Natta	"	25
6		" " "	"	25
7		" " "	"	25
8		Buddha and Nagas from Sanghao	"	25
9		Buddha and Ascetics	"	25
10		Group from Upper Natta	"	25
11		Birth of Buddha	"	25
12		Frieze	"	25
13		Group	"	25
14		Five-altar from Upper Natta and garland frieze from Lower Natta	"	25
15		Group from Upper Natta	"	25
16		Frieze of vines and death of Buddha from Upper Natta	"	25
17		Group from Upper Natta	"	25
18		" " "	"	25
19		" " "	"	25
20		" " Lower Natta	"	25
21		Symbol worship from Lower Natta	"	25
22		Death of Buddha	"	25
23		Niche from Mian Khan	"	25
24		Figure from	"	25
25		" " "	"	25
26		Group from	"	25
27		" " "	"	25
28		" " "	"	25
29		" " "	"	25
30		Elephant Scene from Mian Khan	"	25
	20			
		<i>Tomb of Jahangir at Shahdara, Lahore.</i>		
1		General Plan (double sheet)	Chromolithograph	535
2		Elevation and section (double sheet)	Engraving	650
3		Details of walls	Chromolithograph	625
4		" pavements	"	415
5		" frescoes and mosaics	"	575
6		" tile-work	"	265
7		" " "	"	370
8		" paved walks	"	370
9		" garden walls and alcove	"	250
	9			
		<i>Shahdara garden, Lahore.</i>		
1		General plan (double sheet)	Chromolithograph	565
2		Detail of tile work	"	1,250
3		" " "	"	1,400
4		" fountains	Engraving	250
	4			
	69	Carried over.		

Number of Plate.	Total.	Name of Place or Building.	Price con- st of printing (see opposite page 100).	Cost of printing with colour (where per line for colour).
	69	Brought forward.		
		Lahore Fort.		
1	1	General plan (double sheet) Engraving	475	39
		Golden Temple at Uchitar.		
1	1	Plan and elevation of door (double sheet) Engraving	750	39
2	2	Detail of wood and ivory mosaic Chromolithograph	585	85
3	3	" " " "	633	110
4	4	" " " "	650	85
5	5	" " (double sheet)	1,165	150
		Rudshahi Sarai at Nurmahal, near Faisalabad.		
1	1	Gateway of the Sarai (front) Heliogravure	200	25
2	2	" " (side)	"	"
		Kutub Buildings, Delhi.		
1	1	Plan of the buildings at the Kutub Chromolithograph	550	105
		Dewan-i-khas in the Fort, Delhi.		
1	1	Mosaic wall at the back of Throne (double sheet) Chromolitho- graph	1,100	210
2	2	Mosaic of Orpheus Chromolithograph	1,154	195
3	3	Diagram of condition of Mosaic wall; Lithograph	100	25
		Dewan-i-khas, Delhi.		
1	1	Ceiling of the Dewan-i-khas (double sheet) Chromolithograph	1,350	180
		Tomb of Bismillah at Daulat, Agra.		
1	1	Detail of painted decoration Chromolithograph	850	165
2	2	" " " "	690	155
3	3	" " " "	835	175
		Srirangam Temple, near Trichinopoly, Madras.		
1	1	General plan (double sheet) Chromolithograph	730	130
2	2	Thousand-pillar Hall. Engraving	250	20
3	3	Detail of column	475	20
4	4	Details of columns	500	20
5	5	" " " "	250	20
6	6	" " " "	237	20
7	7	Detail of porch	250	20
	85	Carried over.		

Number of Plates.	Total.	Name of Place or Building.	Former cost of producing and issuing. (Rs. Rupees).	Cost of printing and issuing. (Rs. Rupees).
	85	Brought forward.		
		<i>Srirangam Temple, near Trichinopoly, Madras—continued.</i>		
8		Detail of columns Engraving	225	25
9		Salabgiri Rao, Hall Hologravure	200	25
10		Detail of door and column Engraving	250	20
	10	<i>Tambulakur Temple, near Trichinopoly, Madras.</i>		
1		General plan (double sheet) Chromolithograph	250	150
2		Plan and section of Thousand-pillar Hall, Engraving	250	20
3		Detail drawings of columns	250	20
4		"	300	20
5		Details of door and column	210	20
	5	<i>Great Temple, Madura, Madras.</i>		
1		Muttu Gopuram (gateway) Hologravure	200	25
2		Colonnade in Murugli Porch	200	25
3		Colonnade in Via Vasanta Porch	200	25
4		Jewels used in the Temple Chromolithograph	240	145
	4			
	104			



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✓
25✓

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